



# ***JPRS Report***

## **Soviet Union**

### ***Military Affairs***

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# Soviet Union

## Military Affairs

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03 April 1989

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**Formation of All-Union Association of  
Military-Patriotic Organizations Discussed**  
*18010510a Minsk SOVETSKAYA BELORUSSIYA*  
*in Russian 20 Jan 89 p 3*

[Interview conducted by V. Vasilyev: "The Platform of Pavel Shetko"]

[Text] Pavel Shetko. The name of this young man is well known in the republic. An internationalist soldier, he served for almost 2 years as part of the limited Soviet troop contingent in Afghanistan as the driver of a combat vehicle. In one of the battles he was severely wounded and lost an arm. He was awarded the Order of the Red Star.

Several years ago, Pavel, at that time a student at the National Economy Institute, organized a section of internationalist soldiers under the Komsomol committee. Soon thereafter on the basis of this they established the city Pamyat [Memory] Club, known in Minsk for its good deeds in the area of military-patriotic education of the youth as well as providing aid to those who were wounded and maimed in carrying out their international duty as well as to the families of killed servicemen.

Presently, Pavel Shetko is a lecturer at the Minsk Komsomol Obkom. As before, he heads the Pamyat Military-Patriotic Club and is a member of the All-Union Association of Military-Patriotic Associations.

On 13 January at a plenum of the Republic Komsomol Central Committee, Pavel Shetko was put up as a candidate USSR people's deputy from the nation's Komsomol.

[Vasilyev] I congratulate you, Pavel.

[Shetko] Thanks for the congratulations. Of course, I am happy that the plenum participants showed me the confidence and gave approval and understanding to my pre-election platform. In so doing they reinforced my confidence and affirmed the correctness of the positions.

[Vasilyev] What is the essence of your pre-election platform?

[Shetko] Let me say, first of all, that this is not only my platform but also that of Sergey Morozov and Valeriy Kurdyukov (he, incidentally, also works as a lecturer with the Belorussian Komsomol Central Committee). At a meeting of the young reserve personnel initiative group which was held on the eve of the new year, we three were put up as candidates for the USSR people's deputies by the All-Union Association of Military-Patriotic Associations. So the essence of our pre-election platform is comprised of the association's platform. Of course, the platform at the forthcoming session of the coordinating council will be adjusted and made more detailed but the main things have already been worked out. To put it

briefly, we will be in favor of a fundamental improvement in the entire system of the military-patriotic indoctrination of the Soviet youth, including the preparing of young men for army service and the raising of the role of the Komsomol and reserve military personnel in this important undertaking. And, of course, also to help each 'Afghaner' to find his place in restructuring.

[Vasilyev] Pavel, you have mentioned the All-Union Association of Military-Patriotic Associations. Not all the readers know what this organization is.

[Shetko] Our organization is just being set up. Its main task is to assemble, as they say, under one roof the military-patriotic clubs and associations. At present, in their ranks are over 250,000 persons. They are brought together in more than 3,000 clubs and 2,000 young reserve personnel councils. The association will operate under the Komsomol Central Committee. In February there will be the first session of the coordinating council. A regulation will be adopted for the All-Union Association of Military-Patriotic Associations.

The association is a voluntary social organization having as its aim support for the various youth initiatives aimed at the indoctrination of worthy citizens of our nation and internationalist patriots ready for the labor and defense of the motherland. Our patriotic movement where the leading role is played by the internationalist soldiers will attract to the orbit of its activities not only reserve personnel, juveniles and preinduction youth but also officers from the USSR Armed Forces, medical personnel, civilian specialists carrying out their international duty as well as reserve officers and representatives of the creative intelligentsia.

[Vasilyev] What has brought about the need for its establishing?

[Shetko] At present, the military-patriotic associations, clubs and internationalist soldier councils are confronted with numerous acute problems. These are primarily the absence of information and contacts, as well as poor propagandizing of the movement. Many club and council leaders on the spot do not have a sufficient level of training, the clubs themselves do not possess at times elementary conditions for operation and have a primitive physical plant. Very frequently we encounter a lack of proper attention to realizing the rights of the internationalist soldiers and disabled to benefit.

These and many other problems have necessitated the establishing of the All-Union Association of Military-Patriotic Associations.

[Vasilyev] Its activities require definite material outlays and money....

[Shetko] You are right. We need money. In order, for example, to grant a certain loan under easy conditions to a former 'Afghaner' for joining a cooperative. Or for



providing free aid to wounded internationalist soldiers and to families of killed servicemen. The clubs on the spot also need substantial monetary and material aid.

[Vasilyev] Where do you intend to get the money?

[Shetko] We are counting primarily on our constituent organizers. Recently the association's account was recently opened at the USSR Zhilsotsbank [Housing and Social Amenities Bank]. Its number is 700959. This account receives money from the founders and, we are also hopeful, from all of those who support the movement of internationalist soldiers. However, you yourself understand that voluntary contributions are just the first step to creating our own financial and economic base. The question of producing equipment, supplies and stock at state and cooperative enterprises is in the stage of decision.

I speak a great deal about the association's economic concerns. But I do not want the readers to question whether all of this has overburdened our movement and has moved to the sidelines the practical work in the area of the military-patriotic indoctrination of the youth.

The All-Union Association is proposing to put out its own printed organ. We will widely involve amateur creative groups in holding special-subject festivals and meetings and we will be involved in creating artistic and documentary films on military-patriotic subjects. I feel that we will be able to set up an all-Union summer sports defense camp, an informational training and procedural center and much else.

[Vasilyev] Do you have a proxy?

[Shetko] I do. He is Fedor Pavlovich Zverev, an instructor at the Belorussian Polytechnical Institute and a war veteran. We are persons of different generations but are close in our views and convictions and have worked for many years together in the area of the military-patriotic indoctrination of the youth.

In the next stage of the pre-election campaign my other proxies will become involved in the work. They definitely will. I have many friends among the internationalist soldiers and among those who are close and understand the ideas of our movement.

[Vasilyev] Are you not frightened by the burden which rests on your shoulders in being elected a USSR people's delegate?

[Shetko] Not at all. I feel that there should be representatives of the All-Union Association of Military-Patriotic Associations among the USSR people's deputies. If I become a deputy, I will endeavor to justify the trust by active work.

I can honestly say that when before the new year I was named a candidate for the USSR people's deputies, my first thought was to refuse. You might ask why. I would answer that I felt let down by the experience which I had gained in previous elections. At that time, I was a student. Once some well-placed comrades arrived at the faculty and called me in for a talk. They informed me confidentially that according to the 'apportionment' a candidate deputy would be proposed from among the students of our institute and that the choice had fallen on me. I thanked them for the confidence and began waiting to see what would happen then. What happened was as follows: the 'opinion' appeared that a different person should be chosen as the deputy. The candidate's name was mentioned at a meeting and everyone raised his hand. Later they voted for him....

I have nothing against the elected deputy. He had a good deal of experience. But those previous elections had been a disappointment for me. For this reason I wanted to refuse.

Fortunately, now times are different. I realized that I must not abandon the pre-election fight. I believe that truly the best representatives of the Soviet people, active participants in restructuring, honest, principled persons capable of representing and defending the interests of the voters will become deputies. I intend to wage an active pre-election fight.

### Conscription of Students Questioned, Deferments Called For

#### Present System Hinders S & T Progress

18010513a Leningrad *LENINGRADSKAYA PRAVDA*  
in Russian 3 Jan 89 p 1

[Article, published under the heading "A Viewpoint," by Academician L. Faddeyev: "Students and the Army"]

[Text] It is generally recognized that an interruption in the training of a ballerina or a pianist even for several months does irretrievable harm to their professional career. Daily exercises are an essential element in their lives. For this reason can there likewise be any doubt as to the need for daily drilling of the minds of future mathematicians or theoretical physicists? The experience which my colleagues and I have with our own education and from extended teaching practice at the LGU [Leningrad State University] indicates that a 2-year interruption in instruction at the age of 18-20 years has a most pernicious influence on the development of young high-class scientists.

My colleagues and I who work professionally in the area of mathematics and theoretical physics are concerned by the situation which has developed in line with the training of new personnel for our specialty. It is a question of the consequences of eliminating in 1984 the induction deferment for VUZ students into the army.

We consider this decision to be rash, counterproductive and untimely. It can be said that it is a manifestation of the residual principle adopted during the years of stagnation.

At present we have realized that the resources of our enormous country are not unlimited and for this reason an end must be put to extensive development in all areas, including in the forming of our army. Persons with high creative potential are the most important wealth of the state. They are the engines of scientific progress and determine the level of our nation for the distant future. This must not be forgotten in solving the problem of the most adequate development of the talents of the youth.

Professional training in a scientific occupation demands from the student a complete dedication of mental energy and a certain degree of self-denial. For a young person with experience in life (and the supporters of army service for the students say a great deal about the benefit of this), this, as a rule, is impossible. New interests, the establishing of a family and the need for material support are rather strong diverting factors. As a result we lose the young people with very rare professional abilities.

At the Leningrad Division of the Mathematical Institute of the USSR Academy of Sciences we are clearly feeling the consequences of the 1984 decision. Thus, for the first time in the many years of the operation of the institute, we are unable to find sufficiently strong graduates from the mathematics and physics faculties of the LGU for filling all the existing and primarily the crucial vacancies with young specialists and graduate students. Of course, this is also influenced by the overall loss of interest in the youth for the precise sciences and this is characteristic of our times; but the question of induction into the army plays one of the most important roles in this lamentable circumstance.

I have intentionally taken up the arguments related to my own personal scientific interests as I can speak about these with complete authority. But, of course, there is also more general evidence for the negative impact of the criticized decision, for example, the conflicts between the students and the military chairs of a number of the Leningrad VUZes.

I feel that we should restore the induction deferment for the army, at least for students in the leading Leningrad VUZes which have military chairs for training officers in the given specialties. Not only will the future of scientific and technical progress benefit from this but also, and in particular, the fate of fundamental science and at the same time the defense capability of our nation.

#### More Discussion Urged

18010513a Moscow OGONEK in Russian No 5, Jan 89 p 4

[Letter from V. Denisov, senior instructor on the Chair of Political Economy at the Tajik State University imeni V.I. Lenin in Dushanbe]

[Text] I would like to say that the editors have done a major and essential thing in drawing attention of the public to certain moral questions concerning army life (Nos. 19 and 39 for 1988).

In 1960, I completed the Suvorov Military School and can say that I was not indifferent to the procedures as well as the moral atmosphere which existed in our Armed Forces.

But then the letter of V. Chaplinskiy, a student in the third year of Leningrad University, confirmed certain sad thoughts and observations which I had heard previously from the students taken for military service during their studies in the VUZes. In actuality, can one consider normal a situation when the fellows who have already spent a certain time studying in the universities and institutes are employed for digging basements, for repairing the personal apartments or as the batmen of their commanders?

As is known, the VUZ students began being called up for military service at the very peak of the times of stagnation. At that time we were assured, and this is being done now, that only in this manner was it possible to ensure a further rise in the battleworthiness of the Army and Navy. However, even then a number of prominent Soviet scientists came out against such a practice, saying that we would do enormous harm to the cause of training real specialists.

Times have changed and the situation in the world has now fundamentally altered. M.S. Gorbachev has announced a reduction of a half million men in the army. The operational-tactical and medium-range missiles are being destroyed and the withdrawal of Soviet troops from Afghanistan is coming to an end. The new Soviet military doctrine promulgated in 1987, like the military doctrine of the Warsaw Pact states, proposes a shift to the principle of a defensive sufficiency. From this same viewpoint it is wise to recall the recent statement by E.A. Shevardnadze: "At present of crucial significance for the security of the state are not so much its weapons dumps as the ability to create and produce new weapons. In other words, the reserves of scientific thought, the reserves of technological capabilities and the reserves of skilled personnel."

So I would like to ask just what are we doing? Why cut off the branch on which we are sitting? Is it really conceivable to show such an attitude toward the reserves of scientific thought during the period of the fundamental economic reform? It is one thing when we induct into the army an already trained specialist be he an engineer, a physicist, an economist, translator or musician. I am not against this. But it is stupid, absurd and simply economically inefficient to call up into the army the young men who are successfully studying in the VUZes. For this reason I propose as a first step to discuss the question of abrogating the provision for the call-up of students on the daytime divisions of the VUZes (where there are military chairs) for active military service. This must be done immediately without putting it off.

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**New Decree of Deferments in Progress**  
*18010513a Moscow ARGUMENTY I FAKTY*  
*in Russian No 7, 18-24 Feb 89 p 8*

[Reply to letter to the editors]

[Text] [Question to Editor] In what institutes have they restored the "armor," that is, the deferment from calling up students for military service? From A. Vasilyev, Moscow

[Editorial Reply] Our correspondent asked this question at the Moscow City Military Commissariat.

[Official Reply] Deferment from induction for active military service for students liable for the draft is granted in the following VUZes: the Moscow Institute of Electronic Equipment, the Moscow Higher Technical School imeni Bauman, the Moscow Aviation Institute, the Moscow Aviation Engineering Institute, the Moscow Institute for Radio Engineering, Electronics and Automation, the Moscow Physics Technical Institute, the Moscow Chemical Engineering Institute, the Moscow Physics Engineering Institute, the Moscow Machine Tool Building Institute as well as several faculties of the MGU [Moscow State University].

But ARGUMENTY I FAKTY, like many of our readers, also wanted to learn what the state of affairs was in the institutes in the other cities of the nation. For this reason, we turned to the USSR Ministry of Defense but we were unable to obtain a definite answer during the time when the material was being prepared.

Recently after the article in PRAVDA by the candidate deputy from the CPSU, Col Gen M.A. Moiseyev, we were informed that now a new decree is being prepared on an induction deferment for students for the period of instruction. In accord with this, those students who complete an institute without a military chair will undergo a year of military training in the troops while those who have studied in VUZes with a military chair will be called up only for courses.

**OGONEK Discusses Possibility of Volunteer, Professional Army**  
*18010428 Moscow OGONEK in Russian*  
*No 8, Feb 89 p 8*

[Article by correspondent V. Kuznetsov: "Airborne Troops—Or 'A Construction Battalion in Blue Berets?'" ]

[Text] Just yesterday everything associated with the army was concealed, literally and figuratively, behind high gates. But, today "army life" has come under the close attention of society, including of journalists. In the coming issues of OGONEK photographic reporting about the Soviet Army by a correspondent of the American magazine LIFE who visited in one of our military units will be

published. In the meanwhile we are continuing our discussion about the contemporary realities of the armed forces, and about their prestige element, painted in the color of romanticism and courage. Is this so?

A parachute jump, no matter whether the first or the thousandth, is always a difficult test. Both the "battle-hardened" soldier, and the newcomer who has not yet smelled the altitude, think about a forthcoming jump. Although, for the majority of future airborne soldiers, the most simple jump from the tower, from a height of 20 meters, is becoming the main jump. But, not everyone submits himself even to this height. And only will conquer it. To inculcate will in the airborne soldiers is also a main task of commanders. They teach the soldiers from early in the morning until late in the evening. Even at that there is not enough time. The airborne soldiers must engage constantly in outside matters. I heard airborne soldiers resentfully call themselves a construction battalion in blue berets.

"The army is a two year school," stated the commander of one of the assault subunits in conversation with me, "in which, first of all, the military profession is taught. I will not argue. There are talented fellows who during their army term master to perfection their profession, with which they leave for civilian life. But there are far fewer of them than there are of the average ones. And two years for them is lost time. I think it is not difficult to imagine what would happen if there were a clash in a serious battle between "half-trained" soldiers and professionals, who had entered the army voluntarily, and were giving it not two years, but much longer. Here you say that my soldiers call themselves 'a construction battalion in blue berets.' Why? Yesterday I signed an order sending a group of soldiers to the virgin lands, and today several men are departing for a cement factory. We are a work force for the factory, and they are construction materials for us. Otherwise the garrison would drown in the mud. Need forces me to enter into direct contact with enterprises capable of helping with supply, repair, etc. You say: there are rear services, and what are they doing? I answer: That is not a question for me; I would like to know myself. Restructuring in our army is an inevitable process. If I had my way I would abolish motorized rifle units and leave only airborne soldiers, and train them for all instances of combat operations. Only with one serious amendment—to have good support services in the subunit. Then each would engage in his own job: the airborne soldier to perfect his combat skill; the support soldier to fulfill economic works."

In short, commanders, and VDV [airborne forces] as a whole have enough problems, if only with the paper "battles," a commander endures every day. Four or five hours of work time are spent on them. Thick piles of a dozen and a half or two dozen various commands, orders and instructions from higher headquarters pile up by the end of the day in thick folders. The papers are frequently duplicative, and sometimes even contradict one another. But, each "news" of the army bureaucracy requires

attention, is controlled, and he must react to each, and report to the appropriate level. For the commander bears full responsibility for everything.

I lived a long time among airborne soldiers and observed their service: flights, jumps, forced marches of many kilometers. I was with them on exercises and training drills, took pictures of night firing and hand-to-hand combat, and talked about many things with many soldiers. The fellows spoke with hurt about seemingly simple things: about worn out tarpaulin boots, which are not changed either in 30 degrees (C) heat or in - 50 degrees (C) freezes. They also complained about the inability to purchase with their own money lost berets, or torn or stolen vests. There are no such goods in any soldiers' store. They complained about the lack of airborne overalls. In order to dislodge them it is necessary to stay on the telephones for three days calling the rear services chiefs. Yes, if you would look at the expenditure classes you would learn why soldiers are so poorly supported, and what it costs to keep regiments of colonels without regiments and at least battalions of generals without armies. Who would explain why a lieutenant general must command the society of military hunters? Why do generals command the Central House of the Soviet Army, the military song and dance ensemble, military trade, and the military museum? How much do you reckon it costs to keep one general?

Today we are talking a lot about the army, proposing to look at it honestly and to rid ourselves of half-truths, and we demand constructive changes, and not cosmetic touching up. And this question worries me: What should our army be? Should it remain organized on its former principles, or should a variant of a volunteer army be adopted? "But is that permissible for us," one high ranking military supervisor said to me. "Is it permissible for our soldier, say a tank or armored vehicle driver, to serve six or eight years, and receive money for this? And for fellows 30 years old to command squads?"

I don't know. Perhaps in the opinion of some military leaders this is impermissible, but I think that they would hardly dispute that a 30 year old sergeant with 10 years of service is much more experienced than a 20 year old "half-trained soldier."

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#### **Letters Question Nature of Officers' Service, Value of Draft**

18010389 Moscow SOVETSKAYA KULTURA in Russian 14 Feb 89 p 1

[Article by N. Maydanskaya: "The Week's Mail"]

[Excerpt] What motivates people to write to the newspaper? Some people are seeking help or support. Others are disturbed by an article they read. Still others write to obtain more information. And there are those who have

something to say. The epistolary stream has never run dry. On the contrary, the phenomenon which has recently come onto the scene has made the stream run more deeply and abundantly. This phenomenon is in no way peculiar to letters: It involves our entire life, with its awakening social activity and enormous interest in the changes taking place. It seems that people have left their positions "on the sidelines," never to return.

"I am a happy person," writes Muscovite M. Pankrakteyeva. "On 22 January I participated actively in an election campaign held in the House of Cinema. This is my reward for living 60 wretched years without rights! I find it hard to resist the feeling of freedom of the spirit. I also learned that there are many of us; there are thousands of people whose "eyes are being opened" every day. And the number of those whose eyes are closed is decreasing!"

The number of people whose eyes are closed may be diminishing, but this is another reminder of the responsibility carried by everyone for anything he may say.

This responsibility is addressed by readers in their reply to General Staff Deputy Chief G. Krivosheyev of the USSR Ministry of Defense, who sent us an official response to the article "The Fiddler Will Return, Just Wait and See" (19 January). "How can a colonel general make the categorical statement that 'officers serve in the Armed Forces on a voluntary basis'!? writes indignant Ye. Mosodkin, who served 30 years in the Army. "Does he not know that the Law on Universal Military Obligation and the Officer Service Regulations require an officer to serve 25 years? If he attempts to leave Army service in peacetime on his own initiative, he is subject to imprisonment for a term up to seven years. Do you call this service on a voluntary basis?"

"Comrade Krivosheyev is also less than honest when he discusses call-up of students," writes A. Gorchanov, another former military man and reserve colonel. "For some reason he chooses not to mention that the USSR Law on Universal Military Obligation made provision for deferring students who were attending daytime classes at VUZ's and, as everyone knows, they were not called up before 1984. It is possible that the decision made in spite of the law was necessitated by the military assistance rendered Afghanistan. However, it seems that the time has come to review this provision, the consequences of which are extremely harmful." Incidentally, just the other day General Staff Chief M. A. Moiseyev stated that this question is being resolved positively.

To do this we must "look at the problem from the standpoint of the interests of society as a whole," writes Reserve Sergeant-Major V. Marchenko, an RSFSR people's artist. "We must keep in mind that talent belongs to the people, not to a department. Is it really necessary to



prove that a talented youth can be much more useful to society by serving the cause of culture, enlightenment, and art, rather than by fulfilling his universal military obligation!?"

"The cultured man," counters reader N. Belelin of Gorky, "puts his obligation to other people in first place. This conscientiousness relative to the military obligation was most easily seen when everyone—scientists, composers, and writers—rose to the defense of his native land. Granted that the situation has changed, but there could be accidents and natural calamities. Who should be the first to face difficulties?"

It goes without saying that military personnel due to their state of organization should be the first to arrive at the scene of an accident or natural calamity. This was proven by the Chernobyl tragedy and the events occurring in Armenia and Tajikistan. No one disputes the fact that a dangerous threat to our country would rally everyone—physicists and musicians—to her defense. History gives us sufficient examples. However, that was not the article's topic. The discussion centered on the need for critical examination and review of the premises on which military service is based. Life itself demands this.

Much reader response was aroused by the article "Unity of Place in Modern Drama" (12 January). This is understandable: The questions raised concern or can concern everyone.

"I am a pensioner, a participant in the war, and a veteran of all ranks," writes F. Fridman of Odessa. "I live alone in an apartment. I have a friend in Rostov—a woman—who would like to come here to work and live with me. We do not wish to get married. Why should we? However, you cannot be registered if you are not married. And you will not be given employment if you are not registered. So that's how we live: I am here—alone, ill—and she is there—friendless."

"Let me tell you about some friends of mine," writes G. Yakimovich of Moscow. "Valeriy Petrovich Shmidt—a colonel—served 30 years in the Army. He decided to return to the home of his parents, who are ill and older than 80. He is the sole son. They amassed a multitude of papers and wrote to various offices. And what do you think? All the replies to the letters came from the Mossovet and bore the same signature! They were negative, to be sure."

**Lessons of Adm Gromov's Electoral Struggle**  
*18010495 Moscow KRASNAYA ZVEZDA in Russian*  
*19 Feb 89 First Edition p 1*

[Article by Capt 3rd Rank P. Ishchenko, KRASNAYA ZVEZDA correspondent, under "Pulse of the Election Campaign" rubric: "Candidates, Votes and Leaflets"]

[Text] Murmansk Oblast—I first met with Adm F. Gromov a little more than 2 years ago. At that time, Feliks Nikolayevich, still being first deputy commander

of the Northern Fleet, headed the staff for eliminating the consequences of a breakdown in the system for supplying hot water to Severomorsk. The magnitude of the damage that occurred during the time of very intense cold was such that dozens of multiple-unit dwelling houses, kindergartens and schools were left without heat, water and electricity.

In attending several staff meetings, I saw how energetically and efficiently the first deputy commander conducts them, how promptly he makes decisions, and how strictly and even rigidly he monitors their execution.

I also had the occasion to observe Admiral Gromov in other situations and to see him behind his desk in his office and on the pilot bridge of his ship after he had already become fleet commander. The total of what I saw with my own eyes and heard from others allowed me to understand Admiral Gromov as a very responsible and dutiful person.

One can judge the commander by his subordinates and by their success in combat training. Well, even if this is the way of measuring the work of the admiral, it will appear just as it does in any other appraisal system. I will present just one fact: last year, the fleet ships and subunits won more than one-third of the awards in competition for first place in the naval forces by types of training.

Is it any wonder that dozens of military and labor collectives have nominated Feliks Nikolayevich as a candidate for people's deputy of the USSR?

The commander had five rivals at the district meeting, including three members of the military—Capt 1st Rank O. Bragin, chief of a ship repair plant, and the political officers Capt 3rd Rank I. Shibarshin and Capt A. Titov. You have to hand it to these officers, who were not disconcerted by Gromov's knowledge or job position. They presented well-conceived and well-argued programs that a significant share of the delegates approved. In my view, however, the admiral's 20-minute speech—the same length as the others—was characterized by great detail and more profound realism. In his program, he was able to integrate fleet and regional interests with those of the state as a whole.

I repeat that the programs of the other candidates were also precise, clear and specific, covering the entire range of problems that concern the Soviet people today regardless of where they live. But it was the commander's speech that evoked the greatest response from those gathered together. Admiral Gromov was inundated by a flood of questions, simple and complex, well-meaning and tricky. All of them required of the candidate absolute coolness, immediate reaction, and comprehensive knowledge in questions of policy, economics and many other areas.

During a break in the meeting, I met with I. Mishin, chairman of the ispolkom of the Council of People's Deputies for the city of Polyarnyy. I asked him, as a deputy, to share his impressions:

"Good, everything they say is correct," said Igor Petrovich in response to the request. "But almost everyone promises all sorts of benefits tomorrow, later. But I, as gorkom chairman representing people with their concerns and problems of today, need much today, right now. And here Gromov is in a class by himself as far as I am concerned. It was not so long ago that the Northern Fleet allocated 500,000 rubles apart from any plan for its share in the construction of housing in our city. A military hotel was turned over to the needs of the city health department and the planning time for a new hospital building was reduced from 2 years to 3 months. So I think that the reasons for my choice are obvious."

But the result of the secret voting was a great surprise: there were 263 votes for Admiral Gromov and 306 against him. By the way, the remaining servicemen candidates received even fewer votes.

Why did such a thing happen? Let us look into it. The only person to receive the 50 percent specified by law was Yu. Solodilov, commander of the Murmansk Joint Air Detachment. I think that a major role in his success was played by the great work done by the team put together, as they say these days, by Solodilov. That morning at the entrance to the Officers Club, where the meeting was to be held, his adherents handed out fresh

copies of a special issue of the rayon newspaper and leaflets with Solodilov's program from the print shop. These same leaflets were scattered from the balconies directly into the hall.

Something new? Unusual? Yes, but this is certainly something that one must learn. It is necessary for us service members to gain the skills of waging an election campaign and to do so more quickly. The time when it was possible to wait calmly for a unanimous show of hands has passed irrevocably.

In the final count, the candidacy of Admiral Gromov achieved the necessary number of votes. Even before the start of the voting, the meeting passed a resolution that no fewer than two candidates must be registered with the district electoral commission. And a second voting revealed the preference for the fleet commander. But it may be necessary to give a little thought to why the first attempt failed. It seems that the delegates were not voting against Gromov but against his position. The deputy's mandate served too long, in a manner of speaking, as a free appendix to an important leading position. In the case at hand, apparently, such a bias from previous years was also in effect in the first voting. In any case, psychological nuances of this type should not be dismissed today.

Admiral Gromov and the commander of the joint air detachment Solodilov were registered with the district electoral commission as candidate people's deputies of the USSR for the Severomorsk Territorial Election District No 226.

**GSFG: Excess Junior Engineering Officers Serve as Technicians**

*18010438 Moscow KRASNAYA ZVEZDA in Russian  
14 Mar 89 First Edition p 1*

[Letter to the editor from Sr Lt N. Lozitskiy, Group of Soviet Forces in Germany: "They Were Not Waiting [For Us]..."

[Text] I remember how they fervently impressed upon us, the cadets at the Military Aviation Engineering Academy, that combat units were "suffocating" without professionally qualified engineers and that young creative energy was badly needed there. We believed these words and, accompanied by the cheerful sounds of marching lieutenants and graduates, envied them and awaited our own hour...

And now, having turned up at windswept airfields, we suddenly understand that we are not needed by anyone here as engineers: technicians of all specialties are required. The prospect of obtaining an engineering position has turned out to be as remote and unpredictable as non-flying weather.

Gathering in the smoking-room (but where else can one speak frankly about one's innermost thoughts?), we asked each other: At the academy, why did they maintain that they were waiting for engineers in the forces? Then with time we understood something else: in order to get an engineering position, it is not only important to diligently perform our duties and have a strong theoretical potential but it is also important to have the ability to make contacts and get in bed with the right people. Otherwise, you will be filling a technician's position until the end of your service career since the regiment is overflowing with competitors for engineering positions.

Luck smiles on a few people and the rest resign themselves to their lack of prospects. I can name quite a few officers who, having settled into technical positions, have lost their engineering qualification after a few years. I feel that I will also lose it since I have been serving as a senior aircraft technician for more than three years.

All of us were full of energy, enthusiasm, and creative dreams in our time. And look at how things have turned out. I understand that it is not too easy to sort out this situation. We cannot immediately find the answer about who is guilty of allowing a detachment of "perpetual" lieutenants with engineering diplomas in their pockets to grow with each passing year. But there is a need to think this over. People are suffering. And they are not suffering just because there are no positions for them. Is it not strange that even an engineering education itself sometimes interferes. Let us take just one example.

Sr Lt V. Gilyuk serves in our unit. He graduated from one of the prestigious Air Force engineering schools eight years ago. He earned an engineering specialty in radio-electronics equipment operation. He served in remote regions of the Far East for a long time. He served honorably, conscientiously and showed himself to advantage as a high-class specialist. He now serves in the Group of Soviet Forces in Germany in that same technical position and at that same rank.

For three years, Maintenance Group Supervisor Sr Lt Gilyuk was excellent-rated in combat and political training. A short time ago, the question arose of promoting him, as an incentive, to a rank higher than is required by the position he currently occupies. They prepared the documents and suddenly it fell flat. It turned out that aviation technical personnel directly servicing combat equipment were encouraged in this way. But, alas, it did not apply to officers who have an engineering education but are not filling an engineering position.

There are many questions. Beyond them is a serious issue of aviation unit engineering personnel life and duty. This is a problem that needs a clear-cut answer—do aviation regiments need us in such numbers and, if so, make them really appreciate an engineer.



**Lt Gen V. Plekhanov Commemorates Army-Navy Day, 1989**

*18010382a Kiev POD ZNAMENEM LENINIZMA  
in Russian No 2 (1207), Jan 89 pp 49-52*

[Article by Lt Gen V. Plekhanov, military council member and chief of the Political Directorate of the Red Banner Odessa Military District: "On Guard for Socialism and Peace"]

[Text] The USSR Armed Forces raised by the party of Lenin are a dependable implement in the defense of our socialist fatherland and the cause of peace in the world. The sons of all the nations and nationalities of the Soviet nation serve shoulder to shoulder in their formations. By their unstinting military service they continue and add to their heroic traditions of the Soviet Army and honorably carry out their patriotic and international duty.

The development and modernization of the Armed Forces are a most important component part in defense development the effectiveness of which, as was emphasized at the 19th All-Union CPSU Conference, should be provided predominantly by qualitative parameters. This tenet of the party conference is of fundamental significance for all the Army and Navy personnel. Daily practical work in implementing this presently encompasses all aspects in the life and activities of the Armed Forces and comprises the basis for the furthering and deepening of restructuring going on in them.

During its entire history, starting with Lenin's Peace Decree, the Soviet government has worked to exclude wars from the life of mankind and is doing everything for actually moving toward the ideal of socialism, to a world without weapons and to disarmament. The revolutionary restructuring presently occurring in our nation contains colossal potential for peace and international collaboration. The statement of M.S. Gorbachev of 15 January 1986 set out a program for the establishing of a nuclear-free world. The decisions of the 27th CPSU Congress set out the principles elaborated by our party for an all-encompassing system of international security. This policy is already producing real fruit as the treaty signed by the USSR and the United States to eliminate medium- and shorter-range missiles is being carried out.

New, important peace initiatives have been set forward in the speech by M.S. Gorbachev before the United Nations on 7 December 1988.

For all peoples it is becoming evermore apparent that our nation is ready for radical disarmament, including abandoning the status of a nuclear power and is working for a constructive search for ending the existing imbalances and asymmetries in weapons as well as for discussing the necessary inspection measures. Naturally, the only real basis for resolving such problems is the observance of reciprocity, equality and equal security of the sides. Precisely on such a basis it has been possible for a Soviet-American summit dialogue.

All of this shows that the new political thinking is making headway. But one cannot help but see that the forces of reaction and aggression are putting up fierce resistance to it. We must not underestimate the scale and nature of the still surviving threat to peace.

In taking cover behind peace-loving phraseology, the reactionary circles of imperialism are continuing to speed up the arms race. The United States and NATO are accelerating the carrying out of major programs for designing and producing modern weapons and military equipment. Plans are being developed to "compensate" for the American medium-range missiles being eliminated under the Treaty for Medium- and Shorter-Range Missiles by "modernizing" tactical nuclear weapons, by deploying in Western Europe an additional number of combat aircraft and by building up the arsenal of sea-based cruise missiles on American surface ships and submarines off the coasts of Europe. NATO military theory and practice are based upon the dead-end concept of "nuclear deterrents" and the aggressive doctrines of "direct confrontation" and "flexible response."

This confronts us with the need to carry out our defense construction so as to exclude the superiority of imperialism and guarantee a dependable defense for the peaceful life and labor of the Soviet people. This task is to be carried out, naturally, with the unswerving observance of the requirements of a defensive military doctrine.

In strict accord with the principle of defensive sufficiency, technical equipping is being carried out in the Armed Forces. Its content and main directions are determined by the single military-technical policy of the CPSU. The efforts of science and industry are being coordinated in the interests of developing the required military equipment, for mechanizing and fully automating the major processes of its operation and combat employment as well as for rationally modernizing the models of complexes and systems presently in service.

The Soviet state has been able to give a worthy response to all of the challenges which have been thrown down before it by the forces of reaction and aggression in the past. Presently, our capabilities to maintain a strong defensive and at the same time carry out social and other tasks have been greatly enhanced.

Of course, at present as in the past, the Soviet Union does not want to channel its resources, its economic and scientific-technical achievements into military purposes. But it is forced to do this since the aggressive preparations of imperialism have confronted it with a need to ensure a reliable defense for the socialist fatherland. Certainly the funds and resources being allocated for defense construction are determined by the limits of necessity and sufficiency for ensuring the security of our nation and our allies.

I happened to participate in the work of the 19th All-Union Party Conference. As a military man, the main conclusion for myself was: a decisive condition for restructuring is peace. An enormous responsibility for maintaining it rests on us, the armed defenders of the socialist fatherland.

At present, the winter training period is underway in the district troops. And, without fearing to exaggerate, I can say that in many district units and subunits there has been a substantial progress in military and political training and the skills of the personnel have risen. The results being achieved by the troop collectives in the socialist competition convince us that things are going better where the men energetically join into the work and tenaciously, without sparing any effort, seek out the ways for effectively solving the tasks confronting them. To a large degree this has been aided by the fact that the party organizations of the units and subunits are a dependable support for the commanders in the training and indoctrination of the men. The communists set a personal example in service and discipline and they help their comrades improve their military skills. The party committees and bureaus exactly assessed the personal contribution of each CPSU member and candidate member to the strengthening of military discipline and to improving the quality of tactical and weapons training.

It can be said with complete certainty that the chief result of restructuring as apparent in the district troops is seen by me in the fact that the very atmosphere in the troop collectives has changed and the moral awareness of the men has altered for the better. I am frequently in the units and I see the officers, NCOs and soldiers have a smart set to their soldiers. They discuss and speak about all of the problems openly and assess facts honestly. I judge this from those party meetings which I have attended.

I have been in the motorized rifle battalion which is under the command of Guards Maj N. Nikolayev. What is striking is the activeness of the men and the boldness in raising questions, questions which are acute, vital and to the heart of things. Criticism is not only addressed "downwards" as was often the case before. It runs from the rank-and-file communists to the unit leaders. And what is noteworthy, the leaders have shown a professional attitude toward the criticism and not just concerns of ambition.

In restructuring the party is wagering chiefly on the enterprising and creative man. It is no secret that the misfortune of our recent past was precisely in the fact that man for us was in the background. We spoke about combat readiness, about equipment and much else, forgetting that combat readiness is provided by men and that the equipment is again controlled by men.

Yes, the effectiveness of defense construction to an enormous degree depends upon the development of

modern weapons and combat equipment and the supplying of these to the Army and Navy. The accenting of quality means primarily a radical rise in reliability and an improvement in the combat and operating performance of the weapons.

Ensuring effective development and training of the Armed Forces by improving the qualitative indicators of the weapons and equipment presupposes a higher level of combat skill, technical intelligence of the personnel and a better ideological and moral climate in the units and subunits.

It is important to consider the following. With the present development level of weapons, when combat systems and complexes are collective-use weapons and full of complex technical devices, their servicing and daily operation and ultimately the degree of realizing their combat capabilities depend directly not only upon the individual skills of the serviceman. The mastery of a combat specialty by each man without fail should be supplemented by combat teamwork, by coordination in the troop collective and by interchangeability in the teams, crews and squads.

A modern soldier must have profound, diverse knowledge in order to gain from the weapons and equipment all that is provided in their design, in order to most efficiently employ them in any situation and to achieve the maximum possible results here. But even this is not enough. He must also have strong skills in operating and employing the weapons and equipment.

The army does not have time to develop skills or for vacillation. Within a month or two after induction, a soldier should be ready to act in carrying out combat tasks as the military oath commands: skillfully, with dignity and honor. This is no easy or simple matter. This is why a young soldier must prepare seriously and responsibly for military service even before induction and, upon arriving in military service, work to master the weapons and equipment, to work on a combat specialty with a full effort of spiritual and physical forces and constantly improve skills.

To master combat equipment and weapons means not only to know but also to love them, to be proud of them and skillfully employ them in daily service and combat. These traits have always distinguished a true soldier and, as the combat experience of our Armed Forces has affirmed, have helped him honorably to escape from the most difficult situations. Along with profound knowledge and firm skills, the indispensable components for true combat mastery are high discipline, courage, valor, self-sacrifice and the ability to act actively, with initiative, independently and responsibly.

Finally, a focusing on quality indicators obliges the men to show a careful and responsible attitude toward the weapons and equipment, to all that the Soviet people give to their defenders. Modern weapons and combat

equipment cost a good deal and represent great value. Unskilled, unintelligent actions, negligence or lack of caution tell negatively on the combat readiness of the subunit or unit. Moreover, this can cause significant material harm.

Our nation is not doing and does not intend to do anything above what is essential for defense. Here our position is clear: the forces of the Armed Forces should be equal to what is required for defense against outside attack—no more and no less.

From this viewpoint the structure of the services and combat arms is being improved. Here the main thing is an optimum balance of the combat arms, in particular, of the Ground Forces with the special troops, increased combat independence with a simultaneous reduction in the number of formations and so forth. The search for and realization of internal reserves for improving the organizational structure and, ultimately, for improving the quality state of the other Armed Forces are, in essence, being carried out in the same vain.

The work of the command-political personnel, the party and Komsomol organizations holds a special place in the qualitative improvement of the personnel of the Armed Forces as all the parameters of defense development are in one way or another related to this.

The particular features of modern combat dictate the necessity of developing in the personnel new, higher than ever before, qualities. The main ones here are: a firm ideological and psychological stability, courage, nonroutine thinking, a readiness for great and protracted intellectual and emotional stresses and the ability to overcome hardships and deprivations.

The social base is strong for the development of such qualities in our Armed Forces. At present, more than two-thirds of the young men called up for military service are representatives of the working class and over 13 percent are from the kolkhoz peasantry. A predominant majority of the rank-and-file and NCO personnel have at least a secondary education. Over 90 percent of the Armed Forces personnel is communists and Komsomol members.

This is a strong basis for accelerating the process of maturation for a young man under the conditions of military service and for shaping in his character the traits needed for a defender of the motherland and for a builder of a new society.

The restructuring in the district troops has provided extensive glasnost for the activities of the commanders, political bodies, staffs, party and Komsomol organizations and has made it possible to determine the merits of each from the concrete work results, from deeds and not from words.

For example, take the tank regiment where Officer Yu. Grishin is a party committee member. Recently here there have been marked changes. The personnel is hard at studying the combat equipment and weapons and controls them skillfully in a difficult combat training situation. The regiment has had no infractions of military discipline, and instances of improper relations and the so-called "hazing" have been eliminated. The men excel in close teamwork and a profound understanding of responsibility for maintaining combat readiness.

This has been largely aided by the high readiness of the officers as well as by the fact that the party organizations in the regiment are a reliable support for the command in the training and indoctrination of the men.

In the district the artillery regiment under the command of Lt Col O. Dzisyak is well known. The personnel of this unit stands out in high skills, an irreproachable knowledge of the equipment and weapons and the ability to carry out difficult combat training tasks in a situation as close as possible to actual combat.

Presently in the ranks of the defenders of the socialist fatherland are the great-grandsons of the fighters of the revolution and the heroes of the Civil War as well as the sons and grandsons of those who won our victory in the Great Patriotic War. They have taken over the baton with reliable, strong hands. Proof of this is the heroism and self-sacrifice of our men who carried out their international duty in the land of Afghanistan.

The combat traditions of the Soviet soldiers, in arising in the heroic engagements against the enemy, in the harsh peacetime days and in carrying out international duty, are being developed and enriched by glorious deeds and feats of today's military.

The skills of the district troops which participated in the Osen-88 [Autumn-88] Tactical Exercises were highly praised by the USSR Minister of Defense, Army Gen D.T. Yazov. The soldiers, NCOs and officers in fact demonstrated the ability to act under difficult conditions of modern combat and intelligently carried out the set tasks.

For more than 7 decades now, our glorious Armed Forces have stood guard over the socialist fatherland. Their glorious path has been marked by heroic victories. The legendary past, the present invincible might and constant combat readiness of the Army and Navy—all of this reflects the skillful leadership of the Communist Party over Soviet military organizational development. In following Lenin's teachings about the defense of the socialist fatherland, our Army protects the motherland's security like the apple of its eye.

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**Maj Gen Cherepanov on Mechanics of Reduction in Force**

18010399 Tbilisi *MOLODEZH GRUZII* in Russian  
12 Jan 89 pp 3,6

[Interview with Maj Gen Konstantin Innokentyevich Cherepanov, deputy chief of the political directorate of the Transcaucasus Military District, by M. Yeligulashvili: "Complex Army Arithmetic"]

The declaration of Mikhail Segeyevich Gorbachev at the 43rd Session of the United Nations, in which, in particular, he spoke of a unilateral reduction of the USSR Armed Forces, evoked tremendous interest throughout the world and met with general approval as a step bearing witness to the peace-loving doctrine of our country. This is policy. The Soviet people also strongly endorsed the decision of the government but the decision also evoked interest of another kind here, perhaps more specific. This is also demonstrated by the numerous questions that our readers are asking us. We asked Maj Gen Konstantin Innokentyevich Cherepanov, deputy chief of the political directorate of the Transcaucasus Military District, to answer some of them.

[Yeligulashvili] Here is a question whose answer concerns many of our readers above all. What will be the nature of the mechanism of reduction?

[Cherepanov] Basically the reduction will take place through changes in the organizational-personnel structure of a number of combined units and units stationed in the group of Soviet forces in the GDR, the CSSR, Poland and Mongolia. In addition, in accordance with the processes taking place in the country as a whole and in the army, there will be a reduction of administrative personnel. It has already begun and will continue. It will also involve the Ministry of Defense, the General Staff and the Main Political Directorate right down to the command of the large strategic formations. Officers who served the specified period of service and reached pension age will be discharged from the army. It is thereby very important that this occur without damaging the morale of people who dedicated their entire life to service in the armed forces.

The induction of reserve officers for 2 years of service is being discontinued. This involves absolutely everyone regardless of military specialty. Only the system of call-ups, in which they will go through additional training, remains in effect.

The reductions also effect those 2-year officers who had already been called to service at the time this decision was made.

[Yeligulashvili] Will they request a discharge on their own?

[Cherepanov] Not exactly. Staged schedules have already been drawn up for the reduction. It begins literally now, from the first quarter of this year.

Officers in another category are permitted a discharge if they so desire. It is those who consider their choice of occupation a mistake. Previously, let us be frank, it was very difficult to do this, if only because the training of army officers cost the state very significant sums and, in addition, it was thought that once they had undertaken to fulfill their obligation to their homeland they must do this until the end. But the Ministry of Defense decided to take this step...

[Yeligulashvili] And this is apparently one of the manifestations of the democratization of army life...

[Cherepanov] Yes indeed. And, in concluding the conversation about those through whom the reduction will take place, I will also add that those officers—even if there are not very many of them—who somehow discredited themselves will be discharged whether this is "their will" or not. It is necessary to get rid of this ballast regardless of age and seniority.

[Yeligulashvili] Tell us, will the students now being inducted without exception not be affected in any way by these changes?

[Cherepanov] Such questions are indeed being discussed, whereby they are frequently raised in the pages of newspapers. The matter is frequently put this way: induction into the army hinders the mastering of the basic occupation and disturbs the training cycle of specialists. But let us agree that today the army is one of the state's strongest institutes. And, without in any way ruining the capabilities and talents of the young person, it allows him to go through a school of physical improvement, internationalism and much more. So that I can say definitely that as of today we are not talking about students. They will continue to be inducted, which meets the interests of the state as a whole.

It involves something else. In my view, there should be serious changes made in the system of training in military faculties of VUZ's. In this connection, one might recall the incident that took place last summer at the Georgian Politechnical Institute, when the students refused to assemble for training. I cannot justify the form that they chose to draw attention to the problem. But I am completely with them in those questions that they raised. Indeed, one cannot equate the lads who served 2 years with those who came to the VUZ from the secondary school. There must be a clear gradation. For those who have already served their time, one can significantly reduce the number of hours to cover a subject and they can play the role of junior commanders in the academic department. It may be that it makes sense to give them an oral examination in theory and to carry out performance evaluation exercises and shooting in practice.

But since we have already begun to talk about VUZ training, I would like to talk about the school basic military training, for many problems emanate precisely from there. In Georgia, a check showed that many



unresolved questions have accumulated in this connection. This involves the poor material-technical base; there are no target ranges, tactical training facilities or obstacle courses. Rayon leaders are not paying attention to the problems in basic military training and the Komsomol raykoms could do a lot but are not. This was seen especially graphically in Rustavi, where our commission recently worked. It is long since time to make a fundamental decision on the separate instruction of boys and girls, for the tasks in their training are absolutely different. The basic military training of boys is aimed at the very rapid assimilation of the prototype of the program of 2-year service to facilitate the process of adaptation in the future. For girls, the emphasis needs to be on medical training.

[Yeligulashvili] Let us return to the basic theme of our conversation. We sometimes hear the following concern: Will not the unilateral reduction of the Armed Forces of the USSR lead to a weakening of our country's defensive capability?

[Cherepanov] First of all, it must be said that we have now turned away from the principle of superarmament to the principle of reasonable adequacy. And this historic reality was revealed most prominently in the decision that M.S. Gorbachev announced at the session of the United Nations. The question that you raise is absolutely legitimate. Here one can refer to fresh data. In Washington, the General Accounting Office, the Congressional Research Service and the Bureau of Technological Assessments prepared the special report "NATO and the Warsaw Pact: Assessment of the Balance of Conventional Forces." In this document, the conclusion is reached that the Warsaw Pact has no decisive superiority over NATO. And this is right.

Why did our party and government make the decision on the unilateral reduction? And a very significant one at that; 500,000 servicemen is more than the entire Bundeswehr, which has 485,000 men. In addition, there is a reduction of 10,000 tanks, 8,500 artillery systems, and 800 aircraft. One can say with confidence that all of these decisions were very well thought out and carefully considered. The reductions, which will take place in the years 1989-1990, are fully subsumed in the defensive doctrine and are in line with the principle of reasonable adequacy. They do no harm to the defensive capability of our country and its allies in the Warsaw Pact. But their scope makes them a serious political step by our country.

There are no reasons for panic with respect to our defensive capability but—and this must be clearly understood—there are also no reasons for talk about an even greater unilateral reduction. I have encountered such attitudes as well, where they say that nothing will happen to us anyway so we can continue to cut back.

[Yeligulashvili] There was no superiority but a reduction is taking place. What will compensate for it?

[Cherepanov] The quality of military training, equipment and science. This is with respect to internal army life. Much depends upon the standard of the work of civil defense subunits and there are many problems here, as was clearly revealed quite recently in the disaster in Armenia. Civil defense was not able to cope with the disaster in terms of either equipment or preparedness.

There must also be substantial changes in the training sessions (in this, by the way, I also agree with the students). They must be as intensive as possible. Otherwise everything will be as before. The unit commander responsible for the training immediately started to look for builders, plasterers and painters among those called up so that he could get his facilities in order in the 20 or 25 days. This, besides being unethical, is also antistate, considering what sums are spent in holding the training sessions. Such a practice is now being stopped. Much, of course, also depends upon the desire of those called up to gain a maximum of knowledge and training during the sessions but one must recognize that of primary importance in the given situation is still the unfinished work of the army.

[Yeligulashvili] My last question is more personal in nature. Are not the army leaders and officers getting the feeling that their views run contrary to the general tendencies toward rapprochement between the peoples of the world and to national diplomacy? You have spoken of the depravity of excessively pacifistic attitudes....

[Cherepanov] I understand the sources of this question. For some reason, our army is viewed separately from the people. This must be attributed to shortcomings in our propaganda. This is an allusion to others, including our press. Some statements simply damage our reputation. And the reputation of the Soviet Army was always that it is the duty of every Soviet individual to serve in it.

Service in the army must be advertised in every way possible. Meanwhile, our newspapers are going the way of searching, in a manner of speaking, for hot facts. I am not saying that we have no problems. But we must not invent nonexistent problems. I have in mind, in particular, the recent publication of the article "Interrupted Flight" in "Komsomolskaya Pravda," in which it was stated that conscripts flying from the Tbilisi airport to Khabarovsk got into a drunken scuffle in the aircraft and the crew was forced to make an emergency landing in Barnaul. Some of the conscripts were indeed drunk. Some families still think that the best way to see a lad off is to give him something to drink. There is nothing good about this. But why write that it was an emergency landing, when it was a planned landing for refueling! In talking with the plane's commander, we learned that there was no fight either. The drunken conscripts were clearly displeased with his order that they stop smoking on board and that is when Major Osadchuk asked the dispatcher to call the police. But there was no fight. Neither is there any truth to the author's statement that

we were missing some conscripts. It was originally thought that 191 people would make up the group but at the induction center they put together a group of 171 conscripts (and not 176, as the article indicated) and two escorts, an officer and a warrant officer flew with them. Everyone was on board who was supposed to be and they all flew to Khabarovsk. A commission was established to look into this incident thoroughly.

In any case, however, I am certain that the press must assist and not be a hindrance in bringing together the army and the people. In recent years, there has been a shift in the friendship between the people and the army in the direction of economic relations under the principle "you help me and I help you." When the manager needs people for manual labor, he goes to the commander, who, in turn, asks for materials—not for his own dacha, of course, but this practice is depraved in any event.

Everything was different before. What happened, for example, to the wonderful practice of having military units sponsor educational institutions? It has all come down to "checking off" items in a report.

[Yeligulashvili] And the "Afghan" soldiers grabbed the initiative in the army?

[Cherepanov] Yes, but nothing is becoming of this wonderful undertaking either. At first they did vital, interesting and necessary work but then the raykoms and gorkoms sought their own advantage and what remained of it? The raykoms report "on the work that has been done" in the internationalist clubs and the internationalists themselves have become either discouraged or tired and now, in my opinion, they are more concerned about preserving their own privileges. It is understandable that this is happening because many edicts and orders are really not being carried out. But even more vexing is something else—that a good and necessary cause is dwindling to nothing.

#### **Dep Minister for Cadres on Scheduled 'Review of Officer Cadres'**

18010348 Moscow KRASNAYA ZVEZDA in Russian  
14 Jan 89 First Edition p 2

[Interview with Army Gen D.S. Sukhorukov, deputy USSR minister of defense for cadres, by Lt Col S. Levitskiy: "The Review of Officer Cadres: Interview With Army Gen D.S. Sukhorukov, Deputy USSR Minister of Defense for Cadres"]

[Text] Certification of all the military officers is being conducted this year. In connection with this event a KRASNAYA ZVEZDA correspondent asked the deputy USSR minister of defense for cadres to answer some questions.

[Levitskiy] Comrade Army General, we know that certification of the officer corps in the army and navy is conducted once every 4 years, but now a deviation from the rule has been allowed. Our readers therefore want to know whether this decision stems from the forthcoming reduction of the Armed Forces.

[Sukhorukov] No, the certification has least of all to do with the unilateral reduction of our Armed Forces. By decision of the minister of defense it is being conducted ahead of schedule in order to efficiently fulfill decisions coming out of the 19th party conference, which concluded that the entire defense development must be reoriented primarily toward qualitative parameters with respect both to the equipment and military science and, of course, the personnel of the Armed Forces.

Life itself and the courage and heroism of the Soviet officers in Afghanistan, during Armenia's tragic days... (the list goes on and on) prove that our military forces have professionally trained cadres of high ideological caliber. They honorably perform the difficult military service. The combat readiness of the units and subunits is their concern.

There are those who are standing on the sideline of the restructuring, to be sure. We are not going along with them. It is not right for people who discredit the officer corps to successfully climb the service ladder, enter academies, be recommended for regular promotions and awards and enjoy unearned benefits. This is the objective of the certification: to ascertain with absolute certainty who is worth what. And it is based on principle, calling for discharging into the reserve all those who do not want to serve honorably, those who defame the great title of Soviet officer with their infractions. More worthy comrades will take their place. We must think first of all of the indoctrinational role of certification and of the individual work performed with the people, however. We shall do everything possible to see that the officers strive to serve valorously and strengthen regulation order, take an active part in the life of the party and Komsomol organizations and have a penchant for training and self-improvement.

[Levitskiy] What will be the procedure for conducting the certification and discharge into the reserve?

[Sukhorukov] First of all, it will not be indiscriminate or mechanical. We must not mistreat or infringe upon the rights of a single person.

With respect to the certification procedure, it will be conducted in two stages. During the first stage, prior to 1 July, there will be certification of all the graduates of military educational institutions and officers of the units and ships subject to the reduction announced by M.S. Gorbachev, general secretary of the CPSU Central Committee and chairman of the Presidium of the USSR Supreme Soviet, at the 43rd session of the UN General

Assembly. These are battalion commanders, deputy regimental commanders and chiefs of staff, deputy commanders and chiefs of staff of divisions and their equivalents, and officers with the military departments, delegations and local administrative agencies. Officers with serious deficiencies in their service and in their personal conduct will also undergo certification during this period. The right decision has to be made about the expediency of keeping them in the military cadres.

The rest of the officer corps will undergo certification during the second stage, prior to 31 December.

Instructional assemblies are presently being conducted for workers of cadre agencies at all levels to see that the certification is productive, objective and precise. We must concisely, comprehensively and descriptively define the political, practical, moral and ethical qualities of the officers. We must not forget to take note of their organizational abilities, their ability to work with subordinate personnel, to direct them both in daily life and under combat conditions. We must show the results of the combat and political training, personal qualities and inclinations and prospects for the continued use of every officer, general and admiral for the next 3 years.... The certification should fully contribute to the restructuring in the military.

[Levitskiy] Many questions immediately come to mind. Why, for example, are military school graduates among the first to undergo certification?

[Sukhorukov] That is traditional. After all, the graduate is to be awarded the officer's rank, and a determination must be made as his assignment. Now, of course, a more stringent and principled approach must be taken from the standpoint of the graduate's preparedness to serve in the forces.

[Levitskiy] If any of them have to be discharged into the reserve, how are they to find jobs?

[Sukhorukov] Our graduates ordinarily learn essential occupations, sometimes those for which there is a shortage [of specialists] in the national economy. The matter of finding jobs for those discharged into the reserve, including officers, is an important general state task. The USSR Ministry of Defense hopes that this problem will be resolved and that no one will feel "lost" or slighted.

[Levitskiy] And how does one account for the priority certification of the other categories of officers you have mentioned?

[Sukhorukov] First of all, let me say something about units which are being deactivated. The fate of the cadres needs to be decided immediately. With respect to regimental and battalion commanders, regimental and division deputy commanders, regimental and division chiefs of staff, division commanders and their equivalents, the priority treatment is related to the reduction in the

numerical strength of the officer corps. It will be accomplished by discharging from active duty all those who have served out or exceeded the established terms, and there must be fully competent replacements for them. We will see people off to a deserved rest in our best traditions, of course, with honors and gratitude.

[Levitskiy] Does this apply only to the aforementioned cadre categories?

[Sukhorukov] No, the central organization, the agencies of command and control, local military administrative agencies, the military departments of military educational institutions and other military establishments are not excluded.

[Levitskiy] What is new in the impending certification from the standpoint of its organization?

[Sukhorukov] The cadre agencies have previously acquired good experience in organizing and conducting certifications, and this one will be conducted in the same way. We will include thoroughly planned measures—individual talks, comparisons, reviews, announcement of the certification contents, and so forth. We shall not engage in enumerations. One can read about it all in the corresponding documents sent to the forces in advance. There will be no new forms to fill out and no methods which have not been used before.

I want to direct attention to the individual talks. The chiefs compiling the certifications are required to conduct them. The talks must cover questions pertaining to how the officer has performed, the improvement of his political qualities and performance, his level of morals, aggressiveness and ethics, his professional training, his work style and methods. During these talks the commanders and officers in charge must provide the necessary advice and recommendations with respect to eliminating deficiencies and improving the personal training and the state of affairs in the area of work for which the individual being certified is responsible.

[Levitskiy] The process of democratizing the Soviet society is rapidly picking up speed. How will the certification take this social phenomenon of the restructuring into account? Will it make it possible to avoid instances of taking personal revenge, the elimination of "disliked" individuals and manifestations of subjectivism?

[Sukhorukov] The democratization of our society is an objective process, but it requires thoroughly conceived and goal-oriented action. And the problems which you have mentioned alarm me. In order for such flaws not to occur in the certification, I believe that it must be given maximum glasnost, and the certification commissions must be more vigorously than in the past. In the talks with the officers each of their complaints must be scrupulously looked into. This is why it is essential to have the officer undergoing certification (particularly at the regimental and division levels) and the commander



(or other officer) directly in charge of certifying him present in the certification commission. The secretary of the party organization in the subunit in which the officer is on the roster and a worker from the superior cadre agency should be invited to attend. Particularly when there is a conflict. By doing this we secure the principle of social protection for the officer. We demand increased responsibility on the part of commanders and other OICs for the objectivity and principle of the evaluation of all those undergoing certification and for observance of the principle of social justice. If there is a lack of objectivity or bias and grounds for a complaint, those to blame will be held most strictly accountable.

[Levitskiy] What is the role of the party and Komsomol organizations in the certification, and how can the collective opinion of a specific officer best be taken into account?

[Sukhorukov] Certification of the officer corps is a political matter. The political organs and party organizations must exert a vigorous party and ideological influence with respect to the quality of the certification. The officer corps should be made thoroughly aware of its significance for improving the work conducted with the military cadres and increasing their responsibility for the fulfillment of service obligations and military duty. At this stage of preparing for the certification we must provide for the all-around evaluation of the political and work qualities of those being certified and provide specific practical assistance for them with respect to eliminating existing shortcomings. We need to systematically review the state of the preparatory work performed in the party committees and bureaus with Communists from among the leading personnel. We need to ensure that the opinions of party and Komsomol organizations are actually taken into account in the certification.

[Levitskiy] If an individual considers that he has been mistreated—and such individuals are already writing to KRASNAYA ZVEZDA—where should he go first for the restoration of justice?

[Sukhorukov] Superiors who are certifying subordinates bear personal responsibility for the objectivity of the certifications and the substantiation of conclusions and recommendations set forth in them.

The approved certifications are announced to the servicemen to whom they apply by their immediate superiors. A complaint about a violation of the certification procedure or lack of objectivity in the certification may be submitted by the established procedure no later than 1 month from the day the certification is announced. The final decision on the complaint is made by the superior who approved the certification. If the serviceman's complaint is deemed justified, appropriate changes are made in the certification or a new certification is compiled by decision of that superior.

[Levitskiy] We have had the opportunity to read numerous certifications. Many of them were carbon copies of one another. We then met the subjects of the certifications and were amazed at how they differed with respect to their "service portraits"....

[Sukhorukov] There is no denying the great tenacity of stereotypical formulations behind which one does not see the specific individual, neither his character nor his abilities. It is time to reject fixed patterns. No one is forcing them upon us. The main thing is to see the individual with all his complex character and his social and moral principles.

[Levitskiy] Significant reassignments of cadres are inevitable as a result of the measures you have mentioned. In what cases can these transfers be considered justified and when are they merely formal acts or unjust (that cannot be ruled out)?

[Sukhorukov] The problem of reassignments is also not an easy one. Once again, it must be a matter of a planned procedure for purposes of ensuring the combat readiness of the forces. And we shall transfer people according to the certification conclusions to higher or equivalent positions, for training or other kinds of work if there is cause. Demotions are also possible. They are called for in the case of reductions in manning levels, for reasons of health (a finding by a military medical commission is needed), based on the officer's political, work and moral qualities, and by way of a disciplinary penalty or at the petition of a comradely court of officers' honor. There could also be unforeseen circumstances—family, for example.

[Levitskiy] The principle of the cadre policy is clear: energetic young people are needed in the difficult military work. But we have fine scientific cadres who even at their more venerable age can be of benefit to the Armed Forces.

[Sukhorukov] Military scientists, doctors and candidates of sciences (up to the age of 60 for generals and 55 for colonels), will be considered on a personal basis in the interest of preserving our scientific capability. It will depend upon their contribution to scientific research or pedagogical work. We shall not forget, however, that science too needs an influx of fresh forces and the advancement of young talent in the service.

[Levitskiy] In our experience as journalists we have known of cases in which the certification findings have been announced to the individual concerned after all of the deadlines for this have elapsed....

[Sukhorukov] This sort of thing occurred during the last certification. Deadlines were frequently missed, which produced conflicts. We are now therefore demanding and will monitor the situation to see that the requirements are met: In accordance with the Statute on the Performance of Military Service by Officers of the USSR

Armed Forces, the approved certifications will be sent out by the personal agency of the approving authority within a 10-day period. If the officer has moved to a different garrison, it will be sent to the personnel agency at the new station within a 3-day period. The only exceptions are when the individuals are on leave, on TDY or undergoing medical treatment. When the certification is announced the immediate superior is required to talk with his subordinate and express his opinion on the officer's service and moral qualities. Only then does the subordinate sign the first copy of the certification and indicate the date on which he has read it. I can say the same with respect to deadlines for implementing conclusions on discharging individuals: They must be carried out as rapidly as possible.

[Levitskiy] Comrade Army General, thank you for the interview. And now, a final question which troubles our readers. Today, when the reduction of the Armed Forces is beginning, the Soviet people are concerned about whether this will be detrimental to the nation's defense capability.

[Sukhorukov] Ensuring the complete combat readiness of the military based on our defensive doctrine will be the main consideration in the cadre policy during the reduction of the Armed Forces. The main effort will focus on developing in the officer cadres a great sense of personal responsibility for the assigned job, for improving the field, air and naval training of the troops and naval forces, strengthening discipline in the formations and units and on the ships, and determining the specific prospects for each officer's use in the service. The objective of the reduction is to cut the number of personnel and the amount of combat equipment while simultaneously enhancing the qualitative features of the cadres. It should also be noted that it will not be those whose positions are to be cut who will be discharged, but individuals who have served out or exceeded the established terms.

#### **Plan to Restore Non-Operational Military Equipment Noted**

18010398 Moscow KRSNAYA ZVEZDA in Russian 18 Feb 89 First Edition p 2

[Article by Maj P. Kochnev under "At the Initiative of Patrollers" rubric: "Being in Charge"]

[Text] Far East Military District—When they reported the fulfillment of the monthly plan to Lt Col Yu. Sitchenko, commander of a separate maintenance and repair battalion, he sighed with relief. And why not, the repair workers had labored in the field for almost a week in a tactical exercise and yet had been able to repair the required number of units of equipment "in place."

"We are now working under new conditions," relates Yuriy Markovich. "The introduction of a state plan for the repair of combat equipment that has broken done for

any reason meant not only a fundamental change in the traditional views on the organization of production. The main thing was to change the attitude of people toward their labor."

And it all began with the initiative of national inspectors. For it is necessary to establish the conditions for highly productive labor before putting demands on a person. In surprise inspections, Capt A. Yatsenko (awarded the order "For Service to the Homeland in the Armed Forces of the USSR" Third Class and the medal "For Merits in Combat"), Senior Warrant Officer M. Ganeyev and other members of the national inspection team became convinced that to a considerable extent the losses of valuable working time occur because of the poor development of the subsidiary premises. They worked together to improve working conditions and literally all of them considered themselves not "time-servers" but masters.

The rationalizers Sr Lt Yu. Borovskikh and Sr Warrant Officer V. Shcherban built a stand for the inspection of electrical equipment, which made it possible to reduce the expenditure of time by half. The repair workers successfully mastered argon welding and this gives a second life to components that previously were remelted.

Lt Col Yu. Sitchenko actively supported all the initiatives of the patrollers. He began by mastering technology himself. He was not reluctant to roll up his sleeves and work on equipment when necessary.

Thanks to the new approach, labor productivity improved. They are using electric power sparingly in the battalion. All energy-intensive machine tools and machine units have been converted to an optimum operating regime. And the national inspectors are vigilantly seeing to it that not a single unit of technological equipment is idle.

There are, of course, many problems in the collective. In the opinion of Lt Col Yu. Sitchenko, it is necessary to continue to improve the production base of repair workers and to raise the quality of work. There are also serious complaints against those who turn in damaged equipment.

#### **Defense 'Environmental Inspectorate' Investigates Kerosene 'Lake'**

18010387 Moscow KRSNAYA ZVEZDA in Russian 19 Feb 89 First Edition p 2

[Article by Lt Col V. Mazharov, senior inspector for environmental protection of the USSR Ministry of Defense: "Underground Lake of Kerosene: It Appeared As a Result of the Flagrant Irresponsibility of Officials"]

[Text] Workers of the republic environmental protection society were the first to discover that the local inhabitants of one of the cities in the territory of the North Caucasus Military District were refueling their motor

vehicles and tractors at no cost. The machine operators and drivers were filling the fuel tanks of their tractors and motor vehicles from wells that have been opened near houses along a field road. The environmental protectors thought this was strange and began to provide "scientific" support for their discovery.

It turned out that the fuel is getting into the potable water wells from an underground lake of kerosene that formed as a result of many years of leaking of this expensive fuel from a stationary pipeline belonging to an aviation subunit commanded by Lt Col V. Cherkasov. The Environmental Protection Inspectorate of the USSR Ministry of Defense was informed of the findings. Specialists from this organization along with officers of the appropriate directorates went out to wonder at this marvel.

The fact was confirmed. The aviation kerosene pipeline was constructed 27 years ago and over this time, naturally, it has suffered corrosion, resulting in the loss of its hermetic quality. The fuel seeped into the ground drop by drop.

They began to do some trouble shooting, because this "gift" of fate could at any moment turn out to be an irreparable disaster for the inhabitants. As you know, aviation fuel is not only a toxic substance but also highly inflammable. They promptly determined the limits of the kerosene lake and the directions of the flows into wells. By the way, the water did not withstand the pressure of the petroleum product and a significant part of it left, as they say. The specialists then pumped out the accumulation of aviation fuel and opened bore pits, which secured the wells.

Subunit commander Lt Col V. Cherkasov and the director of the fuel service V. Kozyashev got away, in a manner of speaking, with a light scare. They were given disciplinary fines, consideration having been given to the fact that they were recently appointed to these positions and are not responsible for the actions of their predecessors. At the same time, the aviation kerosene line newly constructed by the local work supervisor's office also does not meet many requirements. Will the appropriate officials benefit from the lesson?

It must also be mentioned that the signals about irresponsibility in the operation of such pipelines are reaching the Environmental Protection Inspectorate of the USSR Ministry of Defense and not other garrisons. Inspectors have already gone out to such addresses.

**Session of Collegium of Main Military Procuracy**  
*18010465 Moscow KRASNAYA ZVEZDA in Russian*  
*22 Mar 89 First Edition p 2*

[Article by Col Just L. Smertin, entitled: "In the Main Military Procuracy".]

[Text] The regular session of the Collegium of the Main Military Procuracy was dedicated to the state of legality and additional measures by the investigative apparatus of the military procuracy to assure it.

At the session, it was noted that the democratization of justice, the overcoming of legal nihilism demands additional measures for the improvement of the activity of the investigative apparatus, the increasing of its authority, and the strengthening of procuracy supervision over the observance of the laws at all stages of criminal procedure.

The Main Military Procurator, Lieutenant-General of Justice B. Popov, summarized the discussion.

### **BTR-80 Daily Maintenance**

81440469a Moscow *TEKHNIKA I VOORUZHENIYE*  
in Russian No 1, Jan 89 pp 24-25

[Article by Col V. Moskaev and Maj Yu. Stoyakin:  
"BTR-80 Daily Maintenance"]

[Text] Daily maintenance is performed immediately after the vehicle is returned to the park, regardless of the mileage put on. At permanent parks, the vehicles are usually serviced at specialized posts where they are brought after preliminary cleaning and refueling.

If the vehicle was on water during operation, they first lubricate the lower king pins of the steering knuckles through the grease fitting located at the bottom of the pin under a threaded plug until fresh grease comes out from under the protector cap (4 points) and the outer joints of the steering linkage tie-rods (8 points). Then they check for water in the brake drums and wheel gear boxes. If water is detected in the wheel gear boxes, the cause must be found and corrected, and the oil replaced.

The daily maintenance includes all operations of a general inspection performed before operating the vehicle. Thus, the operation of the lights is checked in the driving compartment. When the "Check warning lights" button on the instrument panel is pressed, the appropriate lights should light up. The "Turn indicator" light is checked by turning it on, the "Side hatches" light is checked by opening the hatches, and the "Water jet" light is checked by turning on the water jet propulsion device. The "Water jet baffle," "Parking brake," "Oil pressure" (in the engine), and "RK oil pressure" lights are checked in the same manner.

When servicing the armament, if necessary, the bores are cleaned of dust and coated with KRM grease. After cleaning the machine guns, they lubricate the cable and roller pins of the retracting mechanism, the crutch and pin of the rear mounting point of the KPVT heavy machine gun, and the slides of the PKT machine gun; they check the operability of the machine guns' electric triggers and those of the mount's elevating and traversing gear, and its stops and brakes. Pressure on the elevating and traversing gear handle should not exceed 5 kgf. When the brake is applied, the mount should not rotate from the gun-laying drive system, and the stops should not bind. If the elevating and traversing gear handwheels are stiff to turn, the gear teeth of the drives, arc and lower race should be cleaned and washed.

In servicing the vision devices, they clean the input and output windows of the TNPT-1 and TNP-205 devices, and also the protective glass of the TNP-165A and TNPO-115. In order to prevent the TNPO-115, TNP-165A, TNP-205 and TVNE-4B from freezing up when the weather is cold, they are removed; the inner surfaces of the seats wiped dry and coated with a thin layer of TsIATIM-201 lubricant (making sure that it does not get on the rubber seals); and the devices are put in place.

In the power plant, they check for leaks in the fuel, lubrication and cooling systems; if necessary, coolant is added to bring it up to the required level. During the vehicle's first 1000 km of use, the tension of the drive belts on the generators, water pump and fan fluid flywheel should be checked. To do this, 4 kgf of pressure is placed on each belt in middle between the pulleys (Figure 1). The amount of sag in the generator drive belts should be 17-19 mm, and for the water pump and fan flywheel should be 15-22 mm, otherwise the belt tension is adjusted. Later on, this operation is performed during maintenance inspection No 1.

The air filter element is checked for dust content and, if necessary, it is cleaned or replaced. In addition, the position of the dust ejection valve handle is checked; it should be in the "Open" position (valve open). The paper filter element can be cleaned no more than six times, being washed no more than twice. If dust without soot (gray element) is detected on the element paper, it is blown out with compressed air (pressure not over 196-294 kPa, or 2-3 kgf/cm<sup>2</sup>) until it is completely removed. The jet of air is aimed at an angle to the surface of the inner cover of the filter element.

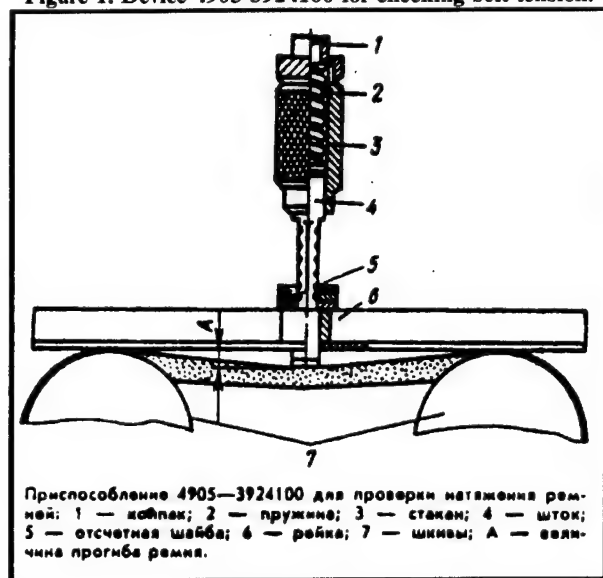
If the filter paper is fouled with soot, oil or fuel, the element is washed in warm (40-50°C) water using cleansing agents OP-7, OP-10 (GOST 8433-57) or household detergent at the rate of 20-25 grams per liter of water, submerging the element for a half hour with subsequent intensive rotation or dipping for 10-15 minutes. Then the element is rinsed in clean water, dried and checked for airtightness by shining a light from the inside. Mechanical damage to the paper or separations are not permitted.

The operating fluid in the main cylinder of the clutch hydraulic drive should level with the top edge of the square opening in the main cylinder plug.

In checking the operation of the lubricating and cooling system of the transfer case, the batteries are first connected—the oil pressure indicator light will light up. The engine is started and put in IV or V gear; with the clutch pedal released half-way, the rotational speed of the engine crankshaft is gradually increased. The indicator light should extinguish. Otherwise, it is necessary to find and eliminate the cause for the drop in pressure or the malfunction in the electrical circuit.

In the steering system, they check the condition of the tips of the tie rods and pendulum arms, and measure the free travel (play) in the steering wheel: with the hydraulic pump not operating, it should not exceed 34°, which corresponds to the length of the arc on the steering wheel rim of 115 mm. If the free travel exceeds this, it is necessary to tighten the steering gear arm nut, the steering box mounting bolts, the pendulum arm bracket bolts, and the steering lever bolts. In addition, there should be no play in the hinge joints of the steering gear. This operation is done with the engine running by

Figure 1. Device 4905-3924100 for checking belt tension.



Key:

1. Cap
2. Spring
3. Housing
4. Plunger
5. Reading washer
6. Gage
7. Pulleys
- A. Amount of belt sag.

turning the steering wheel until the wheels begin turning. The fluid level in the hydraulic system tank of the power-assist steering system should be between the top and bottom marks on the dipstick. Fluid is added with the engine running at idle.

It is mandatory that the brake system is checked. An inspection is made to be sure there are no leaks of operating fluid from the lines and connections of the hydraulic brake linkage. The fluid levels in the master cylinder reservoirs of the brake system are checked (the level must come up to the top edge of the square opening in the master cylinder plug); if necessary, fluid is added to bring it to the required level.

The suspension parts and assemblies, tires, and outer hoses of the central air pressure regulation system are inspected. Condensate is drained from the air cylinder of the system. When servicing during cold weather (temperature below +5°), the level of alcohol in the antifreeze system is checked. This level must be between the upper and middle marks on the indicator (dipstick). If necessary, alcohol is added to bring it to the required level. The alcohol is replaced every 1000 km.

The straightening device of the water jet and the grill of the inlet pipe are cleaned of dirt; the completeness and

ease of opening of the water jet baffle, the raising and lowering of the breakwater shield and evacuating valves, and also the turning on and off of the water jet are checked. With the water jet baffle fully open, the control light on the hydraulic distribution panel should light up. Attention should be given to see that the baffle does not cover the water jet outlet in the open position. The turning on of the water jet is checked by the lighting up of the control light on the hydraulic distribution panel.

The headlights and front and rear clearance lights are cleaned, wiped with a clean towel, and checked for security of mounting. The operation of all lights and signals are checked by turning them on. The serviceability of monitoring and measuring instruments and the operation of each generator unit are checked with the engine running. To do this, it is necessary to turn on the "Right generator" and "Left generator" switches, and with the fuel flow lever set the engine crankshaft rotation speed to 1100-1500 rpm according to the tachometer. Immediately after starting, the ammeter should show a charging current and the "Coolant," "Fuel" and "Oil" gauges should operate.

To check the left generator unit, it is necessary to turn off the "Right generator" switch. The "Coolant" and "Fuel" gauges should also go off. When the voltammeter button is pressed, its readings should be within 27-28 volts.

If the electric motors of the heaters, RK oil-cooler fans, headlights and radio are turned on, the voltammeter should not show a discharging current. It should be remembered that, immediately after starting the engine at a crankshaft rotation speed of 1100-1500 rpm, if the ammeter does not show a charging current and the voltage is below 27 volts, and if the ammeter shows a discharging current with the power users turned on, the left generator or the generator regulator has a malfunction. Without changing the rotation speed of the engine crankshaft, the right generator unit is checked; for this, the "Right generator" switch is turned on and the "Left generator" switch off. The "Oil" gauges should also go off. The voltage and current are checked in the same manner as for the left generator unit.

Problems identified during operation of the radio equipment or intercomm are corrected (if necessary, they are turned over to the radio shop). The equipment is tightened down. Power cables and HF-cables are inspected and checked to see that the connecting wires of the vehicle's onboard system are securely connected to them. The external condition of throat microphones, chest switch cords and plug connections is checked. Damaged paint and varnish covering on parts of radio and intercom equipment is repaired, after first cleaning the corrosion from them.

Overpressure in the manned compartments of the vehicle is checked using an instrument for checking overpressure. It is installed on the sloping armored plate of the hull on the right behind the vehicle commander's seat. At



a normal overpressure (33-36 mm on the water column) in the manned compartments, the instrument's ball is at the upper position (pressed to the upper stop). If necessary, the overpressure is brought to within standards.

The working condition of fire fighting equipment is assessed by the condition of the electrical circuits running to the pyrotechnic cartridges of the fire extinguisher cylinders. With the batteries connected, the "Cylinder 1" and "Cylinder 2" lights on the instrument panel should light up. These lights go out when the engine is started. The "Fire" signal light circuit is checked by pressing the signal light test button on the instrument panel.

The tension of the winch drive chain is checked; there should not be more than 4 mm of droop in the top run of the chain (it is adjusted by moving the bracket of the final drive sprocket).

On completion of servicing the systems and instruments, the condition of rubber seals in the hatch covers is checked. All damaged seals are replaced. The vehicle's spare parts, tools and accessories are serviced and put in the authorized places.

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**Surmounting a Water Obstacle in BMP-2**  
81440469b Moscow *TEKHNIKA I VOORUZHENIYE*  
in Russian No 1, Jan 89 pp 30-31

[Article by Capt B. Shatilov: "Surmounting a Water Obstacle in the BMP-2"]

[Text] When preparing the vehicle, first check to see that the hatch covers, plugs and their gaskets are in place and that the road wheel covers and top roller plugs are tight. Clean the dirt off the guide vanes (12) of the mudguards.

For emergency towing, the cables (5) are slipped on the front towing hooks by the eyelets and placed along the sides of the vehicle, and the buoy (8) is attached to the front right turret eye bolt (7) using the cord wrapped around the buoy and slipped on the post. The driver-mechanic installs the TNP-350B (2) instrument in place of the TNPO-170A.

At night, the FG-126 headlight is mounted on the turret, after first removing the mask frame from the headlight. A grease gun is used to add Litol-24 lubricant to the foot pedal linkage until the lubricant appears from under the pipe sleeve.

If the amphibious assault force is not at full strength, the people and cargo (the weight must not exceed safe limits) are situated evenly along the sides of the vehicle. The cargo is tied down securely to prevent it from shifting during listing and trimming of the vehicle.

Water obstacles are crossed with the water reflector shield and air intake pipe (9) raised. The hatches, the valve for suctioning dust from the air cleaner, and the flap of the winter air intake (14) must be closed. After this, the rear doors, hatch covers and firing ports are sealed. Let us recall that the driver-mechanic can completely seal the hatch cover by closing the locking device for the rear doors. To do this, the wheel (10) must first be turned clockwise.

Next, the hatch cover (13) for venting gases from the preheater boiler is checked to see that it is closed. It is necessary to take into account that the cover has left-hand threads. The winter air intake flap is closed. If there is an opportunity, over a period of 5-10 minutes the airtightness of the vehicle is checked on the water with the engine stopped.

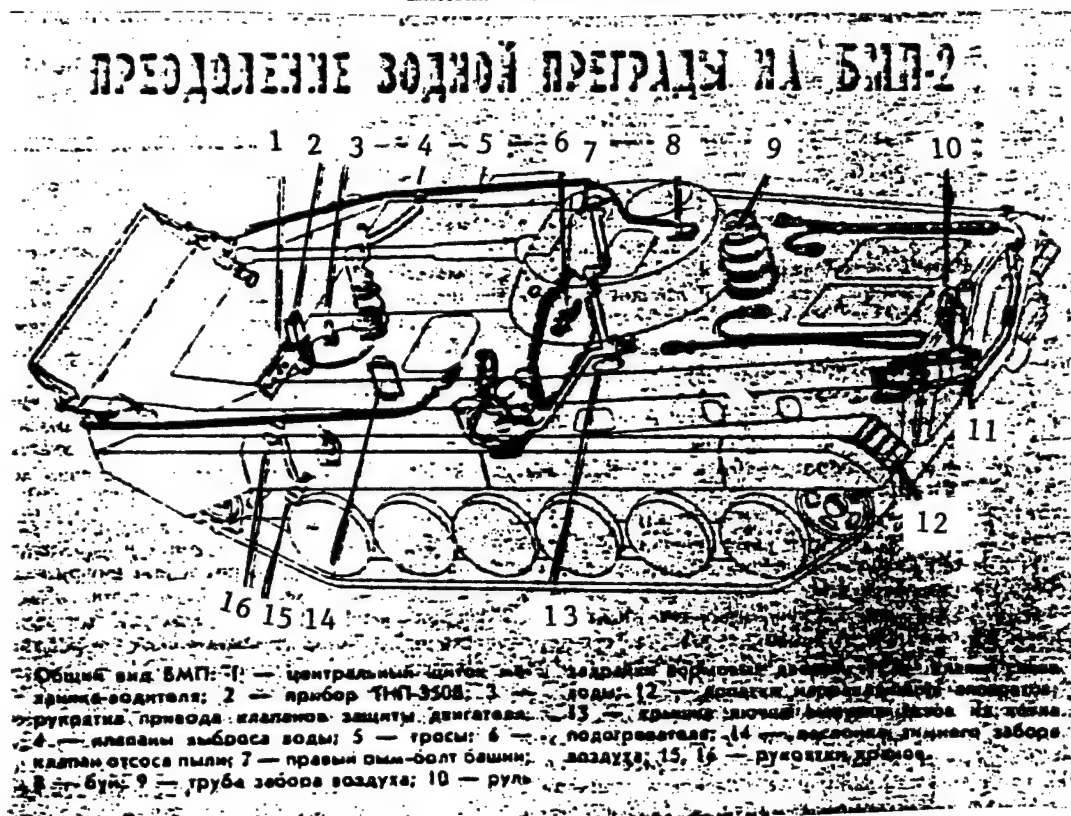
Immediately before the water obstacle, valve handle (15) is placed in the "Enter water" position, valve handle (16) is brought all the way to the "Up" position, the "Float" switch is turned on, and handle (3) is moved to the upper position. The bilge pumps are turned on by the "Pump water" switches on the central panel (1).

After crossing the obstacle, first the "Float" switch is turned off, and the actuating gear handle (3) for protecting the engine is moved downward. The water that has entered the ejector is removed immediately. After making several sharp turns to the left, the vehicle is stopped, tipping it to the right side, and the ejector water drain valves are opened. The engine can be shut off only after the water has been completely removed from the ejector. Then the TNP-350B instrument is removed, and the TNPO-170A installed in its place.

The operation of the engine protection valves is checked immediately. To do this, with the engine off, the engine protection valves are reset using the handle (3), and the handle is then placed in the upper position and secured in the clips. If the handle is already in the upper position, it is moved downward and then back up. On the central panel (1), the driver-mechanic turns on the "Float" and "Battery off" switches; the "Valve" light should ignite, indicating that the engine protection valves have activated. After the inspection, the engine hatch is closed, the "Float" switch is turned off, and the valves themselves are again reset using the handle, which is secured in the clips.

Next, the control valve handle (15) is placed in the "Enter water" position; when doing this, the air intake pipe (9) and the water reflector shield should be raised and the dust suction valve (6) closed. This is indicated by the signal light "Dust suction valve" lighting up on the driver-mechanic's central panel. At the same time, a check is made to see that the vehicle's screening cover is not sagging, otherwise it may catch on the raised air intake pipe when the turret is rotated. After completing the inspection, the handle (15) is placed in the "Exit

External View of the BMP



Key:

1. Driver-mechanic's central panel
2. TNP-350B instrument
3. Actuating gear handle for engine protection
4. Water drain valve
5. Cables
6. Dust suction valve
7. Right turret eye bolt
8. Buoy

9. Air intake pipe
10. Wheel for securing rear doors
11. Water drain valve
12. Guide vanes
13. Hatch cover for venting gases from preheater boiler
14. Winter air intake flap
15. 16. Valve handles

water" position, and the water reflector shield is lowered. The dust suction valve (6) is opened (the "Dust suction valve" signal light should go out), and the air intake pipe is lowered.

After opening and closing the ejector and cooling system water drain valves several times, the valves are checked to be sure they are closed tightly. In order to check to see that they are not plugged up, their valve-stem collars are raised a little with a screwdriver (they should move freely). The bilge pumps are turned off. Remember, to keep the impeller of the rear bilge pump from freezing up in the winter, the pump must be left on for at least 15 minutes after the vehicle leaves the water.

As soon as possible, the vehicle is stopped on an incline to drain the remaining water. To do this, the bilge pumps are turned on for 3-5 minutes, the plug located under the bottom of the water drain valve (11) is unscrewed and depressed, and the water is drained. The remaining water is suctioned out by using an oil gun or rubber bulb. In the winter, one must not forget to open the air intake flap (14) that was closed before crossing water obstacle.

At halts, the cables, buoy and FG-126 headlight are put back in place.

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**Winter Maintenance of MT-T Tracked Vehicle**  
*81440469c Moscow TEKHNKA I VOORUZHENIYE*  
*in Russian No 1, Jan 89 p 14*

[Article by Lt Col M. Bobrov: "Winter Maintenance of MT-T Prime Mover"]

[Text] When preparing the prime mover for winter operation, a number of additional operations are performed besides the regular mileage servicings (TO-1 or TO-2).

The fluid in the engine cooling system is replaced by low-freezing liquid, grade 40 or 65, the level of which is checked with a dipstick through the openings above the fuel filler necks of the right and left compartments. The normal level is indicated by the 55-65 mm mark on the dipstick (54-55 mm for water). It is necessary to remember that the air must be bled from the heating system before pouring in the fluid. To do this, the plug in the top part of the heater radiator is loosened and tightened as soon as coolant appears in the opening.

Summer fuel in the fuel tanks is replaced by Z-02 winter grade; at temperatures below  $-30^{\circ}\text{C}$ , it is replaced by A-02 arctic grade. In exceptional cases, arctic fuel can be used in place of winter fuel. During fueling, the hand-wheel on the maximum fuel flow limiter must correspond to the type of fuel being added ("D" for diesel fuel; "K" for jet fuel. The preheater is started; then the engine is started and allowed to run for 10 minutes. The summer fuel remaining in the fuel lines and fine filters is completely used up during this time.

Next, the serviceability of the pumps for scavenging oil from the transmission mechanisms is checked. The oil level in the transmission fluid tank should be at 68-78 liters on the dipstick. Then the water is drained from the windshield washer tank, the lines are purged with compressed air, and the condensate is drained from the moisture collector. No water should be left in the pneumatic equipment of the windshield washer. The engine lubrication system is filled with M-16IKhP-3 or MT-16p oil.

The engine requires special attention during winter operation. At ambient air temperatures below  $+5^{\circ}\text{C}$ , it must be started only after the preheater is first warmed up (coolant temperature of  $80-90^{\circ}\text{C}$ ) and when the pressure in the system is at least  $2 \text{ kgf/cm}^2$ . If the pressure is lower and the temperature has risen to  $+115^{\circ}\text{C}$ , the preheater must be shut off and the engine oil-circulating pump turned on for 3-5 seconds. After the necessary pressure has been established, the engine is started, after first making sure that the preheater is not operating. We will emphasize: Simultaneous operation of the engine and preheater is not permissible, since the liquid in the engine circulates in one direction when being preheated and in the opposite direction after the engine is started.

The engine is started by using the air starter device with the cone reducing valve turned on or by the combined method with the cone reducing valve off. If the batteries are discharged or the air device is not working, an external source can be used (through the external starting outlet).

The compressed air pressure must be no lower than  $60 \text{ kgf/cm}^2$ , and there must be at least 35 liters of oil in the engine's oil tank. It is recommended that the vehicle be driven in the lowest gears when the oil and coolant temperature in the engine is  $+30^{\circ}\text{C}$ . The engine is considered ready for operation in all modes when the oil and coolant temperature is  $+55^{\circ}\text{C}$ .

The engine must not be run at idle for an extended period (20-30 minutes) or when the coolant temperature is below  $95^{\circ}\text{C}$ , since this results in intensive gumming up of the nozzles, valves and cylinder pistons. Signs of this are ejection of incombustible fuel and oil from the ejectors, a drop in engine power, and difficult starting of the engine. The transmission must not be overheated. If the oil temperature is above  $115^{\circ}\text{C}$ , you must shift to the lowest gear or stop the vehicle, decreasing the rotational speed of the engine crankshaft.

At stops longer than 5 hours, particularly in field conditions, it is necessary to scavenge the oil from the gear box and the reducing valves. This is done in the following manner. Depress the gear box "Scavenge" switch knob for 1-1.5 minutes before stopping the engine. Release the knob after the engine stops, and depress it a second time 5 minutes later. Start the engine and let it run for 1-1.5 minutes. Upon depressing the "Scavenge" knob, there should be no pressure in the gear box lubrication system. The engine is again stopped, and the "Scavenge" knob released after 2 minutes. After this, the oil level in the transmission oil system tank should be approximately 68-70 liters on the dipstick.

Not observing these requirements leads to congealing of the oil and makes it difficult or impossible to start the engine. There must be at least 30 liters of oil in the transmission lubrication system (without scavenging the oil from the gear box). Reducing the oil level can result in a loss of controllability of the prime mover. If necessary to add oil to the assemblies and mechanisms of the transmission, the oil should first be heated to  $50-60^{\circ}\text{C}$ . If it is impossible to do this, the oil should be filled to 5-10 mm below the required level.

Condensate inevitably forms in the prime mover's fuel tanks. When it freezes, the water can rupture the paper elements of the fuel filters, cause the plungers of the high-pressure fuel pump to hang up, and form ice blockage in the system. Therefore, when conducting TO-1, it is mandatory to drain the sediment (8-10 liters). When

parking for more than 2 hours, it is necessary to drain the condensate from the oil separator and the moisture collector. In the first case, the valve is opened; in the second, the plug is unscrewed 2-3 turns. The design of the gear boxes requires that specific grades of oil be used. The transmission lubrication system uses TSPZp-8 oil—a multigrade oil; MT-8p can be used as a replacement,

but at temperatures to  $-20^{\circ}\text{C}$ . As experience shows, with other transmission oils it is difficult to start the engine with the reducing valve engaged, even with a warm engine.

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**PVO Computer Center to Manage Vehicle Equipment**

*18010424a Moscow KRASNAYA ZVEZDA in Russian  
5 Mar 89 First Edition p 1*

[Article by Col A. Yurkin, correspondent for KRASNAYA ZVEZDA: "'Second Generation' Computers"]

[Text] A large computer center at a PVO [Air Defense] Forces vehicle equipment base underwent testing and was put into operation.

"Our control computer system has more than 20,000 parts designations in its memory," say Colonel S. Kinder, base commander. "The computer performs operational record keeping, formation of orders, and other laborious tasks. Transportation costs for spare parts, assemblies, and components have been significantly reduced; the computer makes recommendations for optimizing transport.

The work staff has been significantly reduced. For example, we had to devote four typists to writing out orders. Now there is no need for them, nor for accounting or file clerks. There will also be fewer specialists in the departments. We are now conducting a study of the staff structure and we are thinking of making only one subsection out of three, and work will only benefit from this.

We are still conducting compulsory computer training. There is much to learn. And computer center chief Major Sergey Nikolayevich Novikov's initiative and high professional skill helps here. In a year, we are dreaming of establishing an automated warehousing system with access to the rear services computer network."

"Rear services and military units, our 'second echelon,' are becoming increasingly saturated with computer equipment," said Major General Eh. Ishchukov, clarifying this event. "In particular, a program has been developed for establishing a computer network, based on

micro-computers, for operational management of storage facilities and bases. Military doctors also have interesting applications. They are already using computers for determining diagnoses and in the near future they intend to establish their own network and data bank which hospitals, out-patient clinics, and leading experts can use.

**Competition Held For Battery Commander Position**

*18010424b Moscow KRASNAYA ZVEZDA in Russian  
3 Mar 89 First Edition p 2*

[Article by Capt I. Kiryazov, Far East Military District: "'Brash' Lieutenant"]

[Text] The position of weapons battery commander was vacant in the surface-to-air missile unit. According to the command staff's estimates, there were several real contenders for the position. There were first of all Senior Lieutenants N. Novikov, K. Khotkevich, A. Ushakov, and V. Revega. In order to make the correct choice, they acted in the spirit of the times at the unit and decided to conduct a competition.

To the surprise of many, Lieutenant Evgeniy Lyapustin asked to participate in it, thus having become the youngest competitor for the vacant position and, therefore, the committee would probably be most strict in evaluating his abilities. But, in the end, they were forced to admit: By all objective indicators, the "brash" Lieutenant was the most prepared for advancement. His recent rivals in the competition were the first to congratulate the young officer on his new assignment. One of them, Senior Lieutenant V. Revega, who was barely points behind in the totals from Lyapustin, also received a promotion and became the commander of the command and control subunit in the same unit.

### High Cost of Combat Training Decried, Economy Urged

18010169 Moscow KRASNAYA ZVEZDA in Russian  
21 Jan 89 p 2

[Article by Capt 1st Rank A. Shevchenko, senior officer of the Main Staff of the Naval Forces: "Money up in Smoke: Literally if the Economic Factor Is Not Considered in Planning and Organizing the Combat Training of Ships at Sea"]

[Text] For some reason, it is more popular to look poetically at a ship hitting the head wave with its stem. But the picture is quite different from an economist's office. Evidently it is of interest to the reader to find out what 1 hour of sailing or the firing of missiles or torpedoes costs the state in round numbers.

Somehow I was able to have an "economic" conversation with ship commander Capt 3rd Rank A. Demidenko. And it turned out that the tactically well-trained officer has a quite remote idea of what his ship costs the nation and state. It is quite natural that he looks at so-called empty expenditures and long hours of idle standing of the ship "under steam" from a professional point of view: he sees and is indignant at shortcomings and miscalculations but has never added up the material expenditures associated with them. He simply is not accustomed to doing that.

The situation is analogous in the unit staff. Neither Capt 1st Rank A. Kovshar nor Capt 1st Rank V. Baranov, also very erudite officers in specialized matters, have shown outstanding economic knowledge. The only exceptions, perhaps, were the mechanics, but it would also be difficult to call their view of the problem truly official. There is no reason to be surprised, however. For a long time, the military viewed economy merely from the point of view of a drop of oil leaking out of a pipe or a drop of spilled fuel. Entire barricades of graphic agitation were erected in this connection. But they generally had no effect on that area where thousands of rubles go up in smoke because of lack of initiative and reflection.

Many examples could be presented. There is unsuccessful firing and there are cruises without dependable weather information. It has been noted with justification that each miss during firing training is akin to substandard production and that each vain cruise is similar to the unproductive work of machine tools and mechanisms.

Let us now try to analyze the relevant documents on combat training. They determine rather clearly the expenditures of time necessary to carry out some training measure or other. They are not as definite about expenditures of manpower and resources and there is practically nothing about material expenditures. And a situation in which no one takes into account the cost of a cruise, a flight of an aircraft, or the

performance of a naval exercise does not help in the energetic search for the most expedient (that is, ensuring good quality and yet inexpensive) organization and methods of combat training.

It is generally well known today what serious consequences our economic system and national economy have suffered as a result of administrative-command methods of management and the extensive concept of development. The management of the country's entire national economic complex is now undergoing decisive restructuring on a progressive basis. It may seem at first glance that all of this has nothing to do with the combat training of the naval forces. But practice shows that it is now necessary to introduce economic thinking in the process of combat training as well. This is becoming more urgent and important in connection with the increasing complexity and, consequently, cost of the navy's combat resources. Not only equipment is becoming more expensive but also fuel, electric power, and the products and uniforms of personnel. In the final analysis, there is an increase in the "price" of 1 hour of cruising and aircraft flight and in the cost of the combat training of the naval forces at the base and especially at sea.

Unfortunately, we are not yet accustomed to viewing the process of combat training from precisely this point of view but life urgently demands new approaches to all problems, including the problem of reducing the cost of military activities with the indispensable preservation of its high quality. At the same time, one must not forget that the material resources intended for the carrying out of military training are not unlimited.

One of the obvious ways of "lowering the cost" of military training is to establish and develop training facilities and simulators. This is certainly a promising direction but nevertheless an entire set of questions in the training of forces and staff using simulators is not being covered. In addition, the interest in simulation methods of instruction may mean that personnel will simply forget how to use real combat equipment.

In short, there is no alternative. Only the practical servicing and maintenance of weapons and combat equipment at sea and under different climatic and weather conditions day and night yields a quality training of ship crews for combat operations.

At the present time, unfortunately, there is no serious instruction of basic military economics in a single military educational institution. There is a lack of reference and especially of methodological literature on the question under consideration. It has yet to be prepared. But this is not all. In my opinion, it is essential to have compulsory military economic training, which will make it possible to master contemporary economic thinking.

In evaluating from an economic point of view the operational programming and methodological documents and plans for the combat training of combined units and ships, we can still discover the influence of

extensive approaches in them without any special difficulty. The documents examine a large set of systematic and separate measures. The plans for combat training are overloaded with an unjustifiably large number of measures that are often formulated without scrupulous calculations and a detailed examination of the expenditure of time shows them to be unrealistic.

What is the way out of the existing situation? A realistic way to reduce the cost of combat training may be its integration, that is, the combination of the parallel and simultaneous processing of different elements of the course mission and the stopping of "shuttle" sea cruises of individual ships. The planning bodies must also learn to calculate the cost of ship cruises and aircraft flights and the performance of combat exercises in monetary terms. And when the basic "expensive" elements are revealed, it will be possible to search for ways to lower the cost of combat training in a competent manner.

It is already apparent, however, that it is necessary to carry out a serious revision of all programming and methodological documents on combat training, primarily training courses. In evaluating the operational documents from the point of view of integration, one can

find ways to reduce a whole series of elements of course missions. Nor does the large number of methodological documents on combat training appear to be completely expedient. Future plans are for only three to five such documents, one of which will set forth the planning methods for combat training. This section is supposed to include a new form of plan for combat training, one of the elements of which will be the estimated cost of each measure and beside it a column to reflect the actual cost, which will be completed after the performance of the measure under consideration. A comparison will show graphically when money is being wasted.

And, in conclusion, the main thing that I wanted to say. I am thoroughly convinced that it has become necessary to establish a single military economic service for the naval forces, which would permeate the entire structure of our navy from the staffs of the combined units to the central administrative staff. This service must not only develop methods for estimating the cost of a combat equipment resource or ship as a whole but give estimates and recommendations on economy to the commanders of combined units and ships.



**Western CD Efforts Said to Continue, Increase**  
*18010388 Moscow VOYENNYE ZNANIYA*  
*in Russian No 11, 1988, pp 36-37*

[Unattributed article under the rubric: "Civil Defense":  
"In Great Britain, Switzerland, FRG—and other Western Countries—CD Expenditures Are on the Rise"]

[Text] All the world's countries are reorienting their civil defense activities. It is felt that there is little likelihood of nuclear war, since launching one is equivalent to committing suicide. In addition, the number of accidents and disasters is increasing, and natural calamities are causing enormous losses. Below are some examples.

In 1984 an accident of major proportions occurred at a chemical plant located in the Indian city of Bhopal belonging to Union Carbide. More than 2,000 people lost their lives, about 10,000 were invalidated, and 200,000 people received some kind of injury.

In 1985 Mexico suffered a large-scale earthquake that destroyed 900 buildings, killed 20,000 people, and removed 45

of the medical institutions, thus rendering medical care for victims difficult. The water supply system and communications were immediately disrupted by the first shock waves.

After evaluating incidents occurring throughout the world, the British Government, for example, set up special control over ocean and river flooding, fouling of coastal areas, transportation of hazardous materials inside the country, radiation levels close to nuclear installations, landings of artificial earth satellites carrying nuclear power sources, oil fires on drilling rigs, and rescue operations carried out after civil aviation accidents and incidents at sea. In this connection, the cause of many peacetime accidents is poor performance on the part of service personnel and inadequate monitoring of existing operating rules.

Foreign experts are of the opinion that in extreme situations major importance attaches to informing the population and supplying food. Insufficiency of information leads to negative occurrences - panic, spread of harmful rumors, and irrational behavior. For this reason, information must be timely, simple, and accessible to everyone.

The British Parliament passed a special law relative to peacetime civil defense in which there are provisions for improved planning; financing of individual measures, training and instruction; and recruitment of volunteers for serving in civil defense organizations. The amount of 34.2 million pounds sterling was budgeted for England and Wales for the 1980/81 fiscal year, while for 1986/87 this was increased to 97.9 million pounds sterling (nearly a threefold increase).

At the annual session of the National Assembly's Civil Defense Council of France it was noted that, in addition to material-technical and purely organizational measures, it is necessary to prepare the population psychologically to accept new civil defense procedures and understand the importance of preparedness in the civil defense system proper relative to public safety both at work and away from work.

The FRG Government has in the last few years taken a number of steps to develop and strengthen civil defense and disaster protection services. However, it is felt in the FRG that these steps and other work must be improved. On 1 January 1987 a commission consisting of 80 prominent scientists was organized in the FRG Ministry of the Interior for the purpose of developing scientifically based recommendations on protecting and servicing the population under extreme conditions.

At the present time in the FRG there are about 1.4 million persons involved with CD and disaster protection services. The use of shelters and evacuation to safe areas is the principal procedure employed to render protection from various types of calamities, accidents, and disasters. For example, in 1982 the cost of erecting these buildings amounted to 58 million marks, while in 1986 the figure jumped to 113 million marks. It is planned to raise this amount to 130.5 million marks in 1990, thus making it possible to erect shelters for 500,000 people. Only one out of every 30 persons in the country can be protected, in spite of the large volume of shelter construction.

The importance of civil defense services will continue to grow. This is attested to by the constantly increasing financing for this purpose.

Switzerland is an example of a country possessing a high level of development of civil defense, which, to be sure, has been expensive. There is a large number of shelters in Switzerland; a considerable proportion of the population participates actively in civil defense organizations - the most outstanding feature. The per capita amount spent on civil defense differentiates the country from all others. For example, the U.S. in 1984 spent 81 cents, while in Switzerland the outlay was \$12.60 per person. That is why in the near future every citizen will have a place in a shelter; even now coverage is approaching 95 percent of the population.

There are cases (very rare, at that) where some people refuse to participate in civil defense activities. There is punishment meted out to such offenders - up to 30 days' imprisonment.

Quite a bit is being accomplished to strengthen civil defense in Denmark. Pertinent legislation mandated an annual increase of 98 million kroner from 1985 to 1987. The money has gone to modernize the warning system and erect a system of shelters.

As we can see, the developed capitalist countries have no intention of abandoning or cutting back on civil defense - the task of protecting the population remains. Natural calamities and accidents of an industrial and transportation nature are posing an ever increasing threat. This is the major problem facing civil defense.

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**Col Gen Ryakhov Briefing on Military Work in Armenia**

18010404a Yerevan *KOMMUNIST* in Russian  
15 Jan 89 p 3

[ARMENPRESS article: "Discharging Military and Civic Duty"]

[Text] Representatives of the news media met with the leadership of USSR Civil Defense and the Yerevan garrison commandant at a regular briefing organized on 12 January by the press center of the department of information of the USSR Council of Ministers and the board of the SZh [Union of Journalists] of Armenia.

Appearing before the journalists were Colonel General A. Ryakhov, deputy chief of USSR Civil Defense, and Lieutenant General V. Mosenko, deputy commander of the North Caucasus Military District for civil defense, who head the operational group of the USSR Civil Defense staff in Leninakan and Spitak, and also Colonel M. Surkov, who is a member of the military council and chief of the political department of the Yerevan garrison.

It was noted at the briefing that military units of civil defense of the cities of Donetsk, Saratov, Volgograd, Rostov-on-Don, Krasnodar, Tbilisi and Yerevan are participating in the elimination of the aftereffects of the earthquake, and that the personnel of these units are people of the civilian population who were called up from the reserve specifically for the performance of tasks related to the natural disaster.

Discharging their military and civic duty, the soldiers provided invaluable assistance to the victims of the natural disaster. They extracted 1,471 persons from under the ruins, of whom 146 were alive.

One hundred and forty-two wrecked buildings were demolished, more than 90,000 cubic meters of obstructions were pulled away, and the same amount of construction debris and building rubbish was removed beyond the city limits. Large areas of main roads and access roads that were damaged by the elements were cleared, more than 3,000 heads of cattle and sheep and goats were saved, 363 prefabricated housing units were unloaded, moved and set up, and a significant amount of scrap metal was collected, as well as tufa stone that was suitable for construction.

It was emphasized at the briefing that each day of the fight with the aftereffects of the elements bring to light the best qualities of the representatives of the fraternal republics called into the civil defense regiments: heroism, courage, readiness to come to the aid of the population, and disregard of time and fatigue.

The Donetsk GO [Civil Defense] regiment, which is commanded by Colonel V. N. Zhdankin, and whose chief of the political department is Lieutenant Colonel A. Gurtiy and chief of staff is Yu. Zhiglavskiy, distinguished itself in the best way in the organization of work, discipline and order.

Soldiers of the Saratov and Volgograd regiments, which are headed by communists A. Korbayev and S. Boyko and V. Saidov and V. Zakatalo, are working strenuously.

Soldiers of the reserve of the Yerevan and Tbilisi GO regiments, which were the first to arrive in the area of the calamity, have been working intensively from the very first days. They pulled out 1,176 persons from the ruins, of which 139 were alive. Without sleep and rest in the first 3 days, the soldiers and officers of these units did not leave the ruins, they rescued people, gave first aid to victims, made them warm, fed them and took them to medical facilities.

Thus, a group of servicemen of the reserve, headed by Captain (Res) M. Gevorkyan, the unit's propagandist and military instructor at School No 5 in Razdan, and consisting of Privates A. Sharoyan, K. Muradyan, M. Unanyan and G. Bagdasaryan, pulled 42 persons out of the ruins of an NII [scientific research institute]. After clearing one of the obstructions, Gevorkyan found a woman who was unconscious and whose leg was squeezed and crushed by a pile of heavy concrete slabs. Mkhitar Aramovich applied a tourniquet, and, saving the life of the victim, he amputated the shattered leg.

Real heroism and courage were displayed by Georgian soldiers headed by Lieutenant (Res) G. Ivaneshvili, the company political worker, who had previously performed international duty in Afghanistan. They extracted 37 persons from under the ruins of a factory.

Privates (Res) A. Batalov and S. Teslenko, miners from the Donetskaya Oblast, personally pulled out 15 victims from under the ruins of dwelling houses on Gertsen Street.

Communists are in the vanguard of the struggle with the aftereffects of the elements. Political workers of units, 23 party and 43 Komsomol organizations, are performing party-political work. The propaganda aktiv consists of 182 company and platoon propagandists and 167 editors of wall newspapers and news bulletin leaflets. There is an adequate number of motor clubs, television sets, radios and furnished Lenin rooms.

The first stage of the elimination of the aftereffects of the earthquake has ended. Civil defense units have begun the second stage, whose essence is the removal of the remnants of ruined and demolished buildings and the preparation of sites for the construction of new dwelling houses and projects. The task is extensive and complex, and it entails certain risks.

In Leninakan alone, 211 objects have to be removed, and a million and a half cubic meters of destroyed structures with a total weight of 3.2 million tons have to be transported outside the city limits.

Personnel recognize that time does not wait, and that people need housing and working places, and new hospitals, schools and other buildings. Cooperating with the construction organizations of various ministries that came to Armenia, soldiers of the GO are conducting energetic preparations for their construction, striving to salvage suitable wooden structures and building materials.

Briefing participants answered numerous questions from the journalists, who after expressing their gratitude to the soldiers, in particular, suggested that a monument be built in the disaster area to the Soviet soldiers who came here to help the Armenian people in the hour of their great tragedy.

#### **Transcaucasus MD Political Conference Focuses on Earthquake Relief**

18010404b Yerevan *KOMMUNIST in Russian*  
28 Jan 89 p 2

[Article by GRUZINFORM-ARMENPRESS: "Strong Through Our Fraternity. From a Meeting of the Party-Economic Aktiv of the Transcaucasus MD"]

[Text] As has already been reported, a meeting of the party-economic aktiv of the Red Banner Transcaucasus Military District was held in Tbilisi. The meeting discussed the tasks of increasing the effectiveness of command-political cadres, political organs and party organizations of the troops of the district in implementing the resolutions of the CPSU Central Committee and the USSR Council of Ministers concerning measures for eliminating the aftereffects of the earthquake in the Armenian SSR.

A report of Colonel General I. N. Rodionov, commander of the troops of the district, noted that the situation that has developed as a result of the earthquake in the Armenian SSR requires the elaboration of further practical measures for eliminating its aftereffects. The natural disaster encompassed more than 40 percent of the territory of the republic with a population of about 1 million persons. Twenty-one cities and 342 villages suffered, 25,000 persons perished and 514,000 residents were left homeless. Many installations of industrial,

agro-industrial and construction complexes, and transport, communications and cultural and community facilities were put out of commission. The earthquake also caused great damage to military subunits. Three hundred and fifty-five persons died, and a number of barracks, cultural-community and administrative buildings and dwellings were completely destroyed.

A substantial part of the restoration and rescue work was entrusted to military collectives which were under the direct leadership of General of the Army D. T. Yazov, who is the USSR minister of defense and a member of a commission of the CPSU Central Committee Politburo. According to the results of the first phase of operations to eliminate the aftereffects of the earthquake, military medical personnel gave aid to 5,948 victims and performed 425 complicated surgical operations. The soldiers set up 9,539 tents for the population, and they organized 60 feeding locations, baked 674 tons of bread and issued 12,148 stoves. A total of 34.6 kilometers of access roads and 28.9 kilometers of vehicle lanes were cleared and put into operation; more than 35,000 cubic meters of reinforced concrete scrap was taken away; 1,225 cubic meters of soil was removed; 35 objects were torn down and 83 wrecked objects were blown up; military transports delivered more than 65,000 tons of POL materials to the disaster area, and about 5,000 units of various kinds of equipment were repaired and restored. Crews of military aircraft and helicopters transported about 2,000 injured and more than 5,000 victims, and also a large amount of cargo and equipment. By and large, communists of the directorates of communications, engineering services, rear services of the district and other key services of the district, coped with the assigned tasks successfully.

Soldiers of the Leninakan garrison, which suffered the most from the earthquake, acted courageously and with initiative. They labored selflessly in clearing blockages, and many of the victims owe their lives to the medical personnel of the garrison. Thus, Lieutenant Colonel of the Medical Service D. Yusibov headed a team of physicians that performed 38 complicated operations on the day of the earthquake.

Residents of Spitak comment with great warmth about Lieutenant General D. Turanskiy, the military commandant of this special district [osobyi rayon]. The actions of the personnel of the forces that are part of the operational group subordinate to him are given a high evaluation by a commission of the CPSU Central Committee Politburo. Here at the elevator—one of the most difficult and responsible sectors in the destroyed city—a composite sapper-engineer detachment of the district pulled down the ruins of buildings, recovered the living and the dead and took out the flour and grain.

Well-organized and continuous party-political work contributed to the resolution of complex and responsible tasks. The personal example of the communists and their bold and decisive actions constituted that mobilizing beginning which was necessary in the given situation.

Now, a speaker said, a reconstruction period was starting in the disaster zone. The soldiers are to bring dwellings, barracks and a number of other installations into operation. Large forces were brought in to accomplish this work. But the extremely limited time requires a high level of organization, precision, discipline and close coordination of actions. And here it is very important to mobilize the people in the very first days and to incite them to do shock work, to ensure the coordination of the transport, unloading and supply of materials to construction projects and reliable material and technical support so important to the scale of work.

Considering today's problems, remarked Colonel General Rodionov, it is impossible not to speak also about the circumstances under which restoration is taking place. Not dramatizing the situation, it is necessary to note that worsening international relations in the region have left a heavy imprint on the activity of military collectives of the district. What conclusions should be drawn from this? There is no alternative to international and patriotic education of personnel. But fewer slogans and more deeds are necessary. After all, despite the diversity of tasks, which soldiers have to resolve in eliminating the aftereffects of the earthquake, the main one for them remains the maintenance of reliable security on the southern borders of the motherland.

At the beginning of his speech, S. G. Arutyunyan, the first secretary of the central committee of the Communist Party of Armenia, expressed sincere gratitude for the great attention which is being given by the USSR Ministry of Defense, the Main Political Directorate of the Soviet Army and Navy and the command of the Transcaucasus MD, and for the assistance given to the population of Armenia. There is no cessation for a day or for an hour in the large-scale restoration work in the areas hit by the earthquake, and the tremendous river of aid is not interrupted. It is difficult to say what the situation would be in the republic now, if the creative capabilities of the unity, solidarity, and fraternity of the Soviet people had not been shown in their fullest scope.

The Appeal of the General Secretary of the CPSU Central Committee and Chairman of the Presidium of the USSR Supreme Soviet M. S. Gorbachev to the Armenian people on the day misfortune struck was of decisive significance to the extremely complicated situation that arose for the mobilization of forces and resources and the formation of a new spiritual atmosphere and social attitude both in the republic and in the country, as well as in the entire world. His cutting short a trip abroad and visit to the immediate area of the natural calamity, numerous meetings and conversations with the population, decision-making on the spot and the adoption of practical measures for providing urgent and all-round assistance to the republic, had a great political and moral and psychological effect on the people, and gave them optimism and inspired confidence in the future.

An extremely important mobilizing factor for the republic was the activity of the commission of the CPSU Central Committee Politburo headed by N. I. Ryzhkov, chairman of the USSR Council of Ministers, which directed all work on the elimination of the aftereffects of the earthquake into an organized channel in the shortest time.

The destructive earthquake and the struggle with its consequences was a harsh way to verify capabilities for effective work in extreme situations. This ordeal required a tremendous effort of forces, organizational ability and concentration, and responsible and decisive actions. A graphic and convincing example of this concentration and precision was demonstrated by commanders, political workers and soldiers of the Soviet Army. Comrade Arutyunyan expressed sincere thanks and gratitude on behalf of all of the Armenian people to the Soviet soldiers for their unselfish and selfless help, and also for the deep sympathy of the servicemen who lost their own relatives, dear ones and friends in the days of the natural calamity. The years will pass, but the titanic labor of the soldiers and their daring and skill will not be forgotten.

Soldiers of a railroad subunit displayed selflessness, genuine labor heroism and outstanding training. In extremely short periods, working without laying down their hands, and showing initiative and sharpness, they restored a large and extremely damaged sector of the rail line between Spitak and Leninakan. The personnel of engineer units quickly and accurately accomplished the responsible task of restoring a multi-kilometer water main. In normal times, a week would be required for such a job, but the soldiers, using advanced engineering means, laid a temporary water main to Spitak in a day.

The speaker noted that Soviet soldiers worked shoulder to shoulder with the Armenian people not only in the area of the calamity. At the time of the ordeal, the army assumed the difficult responsibility of maintaining law and order in an area with a mixed population. And it is performing its complex mission with honor, guaranteeing a peaceful situation and normal rhythm of life in our common home.

Here, in Tbilisi, in the ancient Georgian land, the winged expression "brother strengthens brother" is filled with a special meaning. It contains great wisdom. The Armenian people were once again convinced of this in the tragic December days. They will never forget that during the most difficult for Armenia first hours of the earthquake, their closest neighbors—Georgian brothers—did not let them down. As soon as the news arrived about the earthquake, all available construction equipment and first aid teams were dispatched without delay to the disaster area from the neighboring Akhalkalakskiy, Akhaltsikhskiy, Dmanisskiy, Bogdanovskiy and Bolnisskiy rayons of Georgia. Residents of these rayons then and there began to take victims into their homes, and the hospitals hospitalized the injured.



Thousands of children and women from the stricken areas are now resting in health centers of Georgia on the Black Sea coast and are lavished with care and warmth. The leader of the party organization of Armenia expressed sincere gratitude to the Georgian Communist Party Central Committee, the Council of Ministers of the republic and to the entire Georgian nation which took to heart its neighbor's misfortune and troubles. There was also a response to the troubles of the Armenian people in neighboring Azerbaijan. Crane and bulldozer crews worked in two shifts with great responsibility in removing obstructions, and oil products were delivered. Urgently needed gasoline tanker trucks and refueling trucks were sent from Azerbaijan to the disaster area.

All Soviet people extended a helping hand to Armenia. The secretaries of the central committee of the Communist Party and deputy chairmen of the Council of Ministers of the union republics visited the republic. They became acquainted on the spot with the scale of impending work, and they outlined specific practical measures for restoring damaged installations in the industrial and social spheres. Shoulder to shoulder with the entire country, the Armenian people will bring its land back to life.

The reconstruction period is no less complex and humane than the first period, when all forces were thrown into rescuing people. Today also the question is one of rescue—rescuing the vital functions of a large region. All Soviet people, the sons of a great common home—the Soviet Union—will restore the Armenian cities and villages that have been wrecked.

The CPSU Central Committee and the USSR Council of Ministers has adopted a number of resolutions that affect the destiny of Armenia in which the elimination of the aftereffects of the earthquake are treated comprehensively and logically. The entire volume of restoration work is broken down into four principal directions: the construction of housing and social infrastructure facilities, the restoration and reconstruction of industry and the agro-industrial complex, and also the creation of a normally functioning system of life support in the disaster area.

This is an extremely complicated task. After all, by and large it will be necessary to assimilate about 7 billion [milliard] rubles of capital investment and to restore and build 6.3 million square meters of housing. All of this requires a maximum concentration of forces and means, the mobilization of all available resources and great organizational ability and persistence. But the execution of this task is feasible, for it is based on the assistance and support of the entire country on a daily and hourly basis.

A meeting of the party aktiv of the Transcaucasus MD, the speaker emphasized, became an important step in involving personnel of the district in all-round participation in restoration operations. The army has experience in the operational resolution of questions regarding the construction of housing and industrial installations, the development of railroad systems, and the laying of

engineering lines of supply and communications. And there is no doubt in the fact that it is expedient to put this experience in the service of a common cause.

A new phase has also begun in the organization of medical-sanitary assistance to the population. The overall situation has changed substantially: while general surgery and traumatic surgery, on the whole, were provided in the first weeks, today the main task is the fight against infectious and catarrhal diseases and other ailments. Undoubtedly, the military medical personnel will participate very directly in the performance of such important work.

Everything that has been enumerated represents only some of the tasks that cannot be accomplished by the Armenian people without close cooperation with the soldiers. There are many such tasks today.

"It is acknowledged that the personnel of the district set real examples of courage and heroism in the elimination of the aftereffects of the calamity," noted General of the Army V. M. Arkhipov, USSR deputy minister of defense. "And today the armed forces have been assigned the task of doing whatever they can to restore the stricken areas of Armenia."

And very, very much more has yet to be done. Both in the elimination of the aftereffects of the earthquake and in the maintenance of a high level of combat readiness in the Transcaucasus MD. This, of course, is complicated. Therefore, each of the participants of the meeting of the aktiv and all soldiers of the district must determine their own place in the resolution of assigned tasks and apply all of their energy to their realization.

The USSR minister of defense has required that, starting in February, work be placed on a broad footing in Armenia. This is both an extremely responsible and difficult matter, and honorable and noble. Success can be achieved in it, if, among everything else, appropriate living conditions are set up for personnel, taking existing circumstances into account.

Further, Comrade Arkhipov dwelt on questions of improving the social and everyday sphere of life of the servicemen and the work of military trade. In the resolution of these questions, all officials must place greater demands on themselves, freely expose shortcomings and aggressively eliminate them. Each commander and political worker must ask the question this way: What did you do personally to execute assigned tasks and to assure normal living conditions, combat training and work for subordinates? Real possibilities exist today to improve the life of servicemen and, consequently, to improve the living conditions and work of personnel in the areas of natural disaster.



Resolving responsible tasks for the elimination of the aftereffects of the onslaught of the elements, improvements in troop combat training and a clear understanding by each soldier of the role and place of the army in the life of the country should not be forgotten. Such an understanding must be attained, first and foremost, in the process of individual work with people.

Soldiers of the district must further strengthen cooperation with local party and soviet organs for an absolute fulfillment of the plan for construction in the earthquake areas. This plan is a state task, and it must be fulfilled.

"The words 'Thank you, soldier!' rang out a thousand times from the mouths of people who were freed from under obstructions, and who received the help of military medical personnel," said Fleet Admiral A. I. Sorokin, first deputy chief of the Main Political Directorate of the Soviet Army and Navy. "They were addressed to military pilots, engineers, railway workers, builders, workers of the rear services, physicians, personnel of civil defense subunits, to all who performed traffic control and regulating service, who stood in the way of looting and excesses, and who helped victims to find one another, to evacuate and to put their daily lives in order."

Now the commanders, staffs and party organizations are taking effective measures for the activation of international education and further strengthening of ties between the army and the people. Thanks to this in many ways, under conditions of a destabilized situation, provocative speeches inspired by extremists and the introduction of a special situation in a number of areas of the region, the personnel of the multinational military collectives displayed restraint, showed an understanding of the situation and is successfully performing the responsible tasks that were assigned to them.

The impending Plenum of the CPSU Central Committee on Problems of International Relations in the USSR reinforces the political responsibility of the communists of the district for the prestige of the armed forces as schools of international education and for discipline and order in everything. Positive processes are beginning in the people's frame of mind in connection with the measures adopted in the republics of the Transcaucasus. It is very important now to analyze fully and deeply the situation that has developed and, with this in mind, to set up work on international education in military collectives and to energize the activity of commissions and groups on international relations in units and subunits.

Educational work needs strengthening, first and foremost among the warrant officers, which is the most homogeneous group of servicemen in national makeup formed from the local population.

Holding elections for USSR people's deputies has great significance for strengthening the friendship of representatives of the people. There are important features in the ongoing pre-election campaign, including those in the organization of propaganda work. It is necessary to reason out carefully how to hold elections organizationally under conditions of alternative candidacies, after regarding all of the work of the Appeal of the CPSU Central Committee as being of primary importance. It is important to direct the increase in socio-political activity of personnel that has been aroused by preparations for the elections into a channel for resolving tasks for the further cohesion of multinational military collectives and the creation of a situation of friendship and trust in an army environment. On this basis it is necessary to ensure an increase in the combat readiness of units and labor activity, and to achieve a further strengthening of the discipline and organizational ability of servicemen.

Colonel General N. A. Chekov, USSR deputy minister of defense, talked in detail about the scale of construction work which has to be performed by soldiers in restoring the damage that was caused by the elements. In particular, 2,000 apartments have to be put into operation in 2 years, including a 40-apartment dwelling unit in Leninakan by the 10th of August of this year. It was observed that not one apartment built earlier in that city by soldiers was destroyed at the time of the terrifying underground shocks.

The USSR Ministry of Defense has allocated substantial monetary resources to the Transcaucasus MD for the conduct of restoration and construction work, and nine military construction detachments, two motor vehicle convoys with 100 vehicles each, and other equipment have already arrived there. A territorial construction directorate is being organized in Leninakan which will be directly subordinate to the construction directorate of the district. General plans for the construction of installations have been worked up, a speaker emphasized, but great and intensive work is necessary in order that the beautiful buildings printed in the plans become a reality.

These officers and generals of the Transcaucasus MD also spoke in discussions at the meeting of the aktiv—M. Surkov, P. Brozhko, V. Terentev, S. Mayev, Yu. Shcherbachenko, A. Kartapov, I. Pomazov, V. Aksyukovskiy and P. Korotkikh.

Taking part in the work of the meeting were D. I. Patiashvili, first secretary of the Central Committee of the Communist Party of Georgia; A. Kh. Vezirov, first secretary of the Central Committee of the Communist Party of Azerbaijan, and O. Ye. Cherkeziya, chairman of the Council of Ministers of the Georgian SSR.

**Results of Socialist Competition in Military Construction for 1988**

*18010501 Moscow KRSNAYA ZVEZDA in Russian  
17 Feb 89 p 1*

[Article under "In the USSR Ministry of Defense and Main Political Directorate of the Soviet Army and Navy" rubric: "Results of the Competition of Military Construction Personnel"]

[Text] **The USSR Ministry of Defense and Main Political Directorate of the Soviet Army and Navy have summarized the results of socialist competition in military construction units for 1988.**

It has been noted that processes of renewal are gaining strength in most labor and military collectives and that positive changes are taking place.

In 1988, military construction personnel fulfilled 101 percent of the state plan for the assimilation of capital investments, 102.5 percent of the plan for the introduction of fixed capital, 100.8 percent of the plan for putting dwelling houses into use, and 101.8 percent of the plan for the volume of construction and installation work. In so doing, the entire increase in the amount of construction and installation work was achieved through increased labor productivity (4.8 percent compared with the planned 3.2 percent).

The highest production indicators in socialist competition were achieved by the organizations managed by comrades G. Glazunov, F. Kapura, V. Maleyev and A. Popov and by the enterprises where comrades Yu. Zhegin and V. Kutsenko are directors.

The military constructors of the Moscow, Central Asian and Far East military districts, Northern Fleet, and organizations headed by comrades A. Bitukov, V. Dukhin, A. Zotov, S. Kartsidze, Yu. Kuzmenko, L. Lapshin, V. Mikhaylov, Yu. Nenakhov, A. Novosadov and L. Khizhnyak finished 1988 with good production indicators.

Also leading the competition were the collectives of enterprises headed by comrades A. Vaysero, V. Grishchenko, V. Kutsyuruba, V. Mineyev, I. Mikhaylov, V. Nazarenko, L. Nekrasov, V. Sogrin and V. Chervonenko.

The collectives headed by comrades V. Volkovskiy, A. Klinov, V. Kolesnikov, N. Pershin, V. Sinitsyn and O. Shadruxhin were victorious in socialist competition in the planning and surveying organizations of the Ministry of Defense.

At the same time, a number of organizations and enterprises did not fulfill the planning targets and socialist obligations for the putting into operation of production capacities, dwelling houses and facilities for social and cultural-domestic purposes as well as for several other indicators.

The builders of Siberian, Ural and Volga military districts, the Moscow Air Defense District, and the organizations managed by V. Drobyshevskiy, V. Imnadze, V. Iosipenko, I. Kiziyev, A. Makarov, A. Rudko, G. Rumyantsev and V. Sapryga.

The builders of Ural Military District, the Pacific Fleet and the organizations directed by V. Grigorev, A. Kurakov, N. Kulikov, P. Fedchenko, V. Fedorchenko and others did not fulfill the plan for the introduction of dwelling houses and the Transbaykal and Odessa Military Districts, Baltic Fleet and organizations managed by comrades V. Savchuk, G. Synkov and others failed to fulfill the plan for social and cultural facilities.

A number of construction organizations are introducing the collective contract, full cost accounting and self-financing in an inconsistent manner. The economic training of personnel, especially at lower levels, has not been brought up to the proper standard. It is not always based on specific labor experience.

The problem of the quality of construction and installation work is still unresolved. The financial situation of a number of organizations and enterprises is unstable, which makes their conversion to new management conditions significantly more difficult. Too little use is being made of the reserves for improving the organization of production and for raising the efficiency of the utilization of building machines and motor transport.

The pace of the technical reequipment of a number of enterprises in the construction industry remains slow. Substantial results in the strengthening of military and labor discipline and in ensuring safe working conditions have not been achieved everywhere.

Commanders, political workers and social organizations of military construction units must fight harder for economy and thrift and resolutely put an end to poor management and waste. They must be more active in generalizing and disseminating the experience of advanced construction organizations and utilize this experience in teaching personnel an innovative approach to resolving the set tasks.

It is necessary to raise the efficiency of the work of commanders and political cadres, political officers, and party, trade-union and Komsomol organizations in the further strengthening of discipline in military construction organizations and units.

**MiG-29 Factory Converting to Some Consumer Production**

*18010451 Moscow IZVESTIYA in Russian  
4 Mar 89 p 1*

[Article by IZVESTIYA Special Correspondent V. Belikov, entitled: "The MiG-29's are Created Here: Reporting from a formerly Secret Shop".]

[Excerpts] [First paragraph is an editorial introduction-] **The oldest aviation construction enterprise in the country has for the first time opened its doors to journalists and correspondents from the USA, England and Canada.**

Daily, hundreds of workers of the Moscow Machine-building factory "Znamya truda" [Banner of Labor] ... [Passage on history of facility since 1909 omitted]

The shops of the factory are simple, high and light like a huge warehouse. It is surprisingly quiet for a production facility in which supersonic aircraft are created. ...

—The MiG-29 is being continuously improved, the factory director, A. Manuyev, told me ... Therefore, continuous design and technological tracking of the series production is taking place. ...

—But in the assembly area I did not see many of the machines.

—We produce them precisely according to demand, and we have no unused capacity standing idle. We are carrying out conversion—a partial changeover to production of civilian products. This is above all with highly productive automated machinery for agricultural industry, which we had received from the former "Minlegpishchemasha" [Ministry of Machine Building for Light and Food Industry]. ...

The aircraft designers have carried on with their own creations without reduction. 18 days in three shifts was spent working on a machine in testing, but today these automated devices are operating at the wholesale trade bases of 8 cities, freeing hundreds of people from exhausting hand operations. During the current year the factory trademark will also appear on 250,000 popular juicers, on improved kitchen combines and on some twenty [types of] consumer goods.

### **NVP 'Arbitrarily' Cancelled in Some Estonian Schools**

18010186 Tallinn SOVETSKAYA ESTONIYA  
in Russian 12 Jan 89 p 3

[Article by N. Redko, Colonel; chief, Political Department, Military Commissariat, Estonian SSR: "At the Threshold of Service"]

[Text] Thousands of youths leave for military service in May-June and November-December of each year.

In the opinion of officers of the Republic Military Commissariat, the last—this past autumn's—call-up took place as usual (we describe the situation in these terms for the present). The representatives selecting their groups were also satisfied. Physicians observed that the boys are healthier and more athletic-looking but tend to be sedentary. This generality may be deceiving, however, since at times it is formed by extremes. For example, Ioel Peetsalu and Zair Nikarev from Pyarnu, Yaek Alla and Margus Yatsa from Payde, and Rayvo Kabur from Kharyukskiy Rayon were ready for induction both mentally and physically. (There is no doubt that they will become quickly acclimated in a military collective of any military district and that they will not fall victim to the vicious and notorious hazing and other vices to which new conscripts may be subjected.) T. from Khaapsalu, A. from Pyarnu, and V. from the Maritime Locality of Tallinn will run into difficulty. (I am not using their real names so as not to cause their parents needless worry.) Privates Peetsalu, Nikarev, Alla, Yatsa, Kabur, and many others presently in service are adept at sports. Even at the induction station they displayed a fair grasp of military subjects. This was the conclusion made by "examiners" from military units; the conscripts' strong points will enable them to become assets to the military. The trio, which was given letters of the alphabet for identification purposes, was assigned to construction units. To tell the truth: there demands on them will be fewer and tasks simpler.

The above are individual cases, of course. However, is this not the origin of a sort of struggle of opposites which in the Army collective takes the form of the process called "non-regulation relations"? They show up in inductees as early as the Lasnamyae induction station, before the conscripts are able to don their military uniforms. These are isolated cases, to be sure, but they illustrate the extent of a phenomenon that is foreign to us.

A few words about the induction station. Realizing that parents are concerned, in the fall call-up we made it possible for them to become familiar with the work of the Republic Induction Station in Lasnamyae, and with the manner in which conscripts are processed. A jurist answered questions, and they met officers who were there to welcome the replacements. We plan to set up telephones so that conscripts can call their parents long

distance before departing for their duty assignments. We could have resolved a number of other problems, but unfortunately the shortage of interior and exterior space did not permit this.

Now let us attempt to briefly consider the causes affecting the state of preparation of young men for military service and determine why it may leave something to be desired. In this connection, it would be desirable if this topic were taken up not only by the parents of conscripts and by military commissariat workers, but also by executives of city and rayon party and soviet organs, especially educational organs and Komsomol organizations. The problem must be considered in an aspect broader than mere preparation of youth for military service, since we all know that in two or three years the young men will return home and be assimilated into the life of the rayon, city, and republic.

A youth first comes into contact with the Army when he registers with the military commissariat. He registers just at the time he is starting his military instruction in school. However, ...

The education guidelines of Estonia make no mention whatsoever of minimum military training a young man should undergo. Not only that: In some republic schools basic military instruction is arbitrarily excluded from the program; instruction materials have been removed (the 1st, 4th, 7th, 9th, 42nd, and 56th Middle Schools in Tallinn, and Middle Schools No 1 in Payde and Tartu).

There is no doubt that a progressive and alternative-lacking desire for universal disarmament is sometimes interpreted in its simplest context: throw all weapons onto the trash heap, and do it now. However, we all know that this is out of tune with the realities of our time, with the fact of confrontation between powerful military blocs. Such questionable "decisiveness" on the part of wise—in the eyes of youth—adults is immediately reflected in the attitude of those who will soon enter the Army. The result is emotional confusion (on top of what we already experience in our complicated lives): on the one hand, beat swords into ploughshares; on the other, learn, soldier. Do we not at times confuse the desirable with the actual? (For example, as described by eyewitnesses, basic military training in Estonia in the 1920s and 1930s was considerably stricter and more intensive. It was carried out by military cadre.) Can it be that the principals of the abovementioned schools do not understand that even a socialist state has a need to assure its defense? That poor military instruction in schools renders a lad's service more difficult? In this matter the schools should operate in the interests of the graduates—in consonance with the interests of the state.

Let us now discuss the work of conscription boards. A board consists of representatives of city and rayon ispolkoms, party and Komsomol committees, the militia, a physician, and a military commissar. The board functions in accordance with the USSR Law on Military

Service Obligation, making a decision in each case: induct the young man or not; to what kind of unit should he be assigned. This is the time to take a fatherly interest in his welfare, in his fate. To do this, however, all pertinent facts must be properly considered. This is how the boards function in Rakvere, Vilyandi, Valga, and Narva. But alas! in Paydeskiy, Kharyukskiy, Raplaskiy, and in some other rayons the conscription boards are always understaffed and do not allow the conscripts due consideration, reasoning that : "This is not my boy. Besides, the work load is heavy here."

Also very superficial is the work of some medical personnel in their examination of conscripts to determine fitness for service. In 1988 the Republic Conscription Board sent back a large number of young men from the induction station (which is the threshold of the Army). Some of them were unsuitable for service because of mental, physical, and personal shortcomings (inadequate performance on the part of the rayon conscription board). Others were found to be unqualified due to poor health (poor medical evaluation or callousness on the part of some physicians).

It is one thing for us to speak of poor performance on the part of induction officials. But what can be said of the young soldier? He can only grit his teeth and curse everyone and everything, since the simplest things are beyond him; he cannot possibly keep up with his comrades.

Is it not better to improve the training of young men by utilizing the resources allocated by the state for basic military instruction and the organization and maintenance of defense-oriented sports and health camps, etc.? If we are to speak of fighting, then let this be a struggle for genuine restructuring (perestroyka) in the very process of preparing the future soldiers, for the education not of a militarist, but of a citizen capable if need be of defending his home, his parents, and his country with a weapon in his hands.

Now a few words about duty stations of our conscripts. Of all the youths called up in the republic, 23 percent serve in the Baltic Military District; 28 percent are assigned to units located in the GDR, PPR, CSSR, and HPR. The remaining inductees are assigned to service within the borders of the USSR.

#### **DOSA AF CC Chairman Interviewed on Occasion of 'DOSAAF Month'**

*18010173 Moscow KRASNAYA ZVEZDA in Russian  
25 Jan 89 p 2*

[Interview of Col Gen N. Kotlovtssev, chairman, DOSAAF Central Committee, by Col V. Gavrilenko, KRASNAYA ZVEZDA correspondent: "To Reject Pretense"]

[Text] **The All-Union Month of Mass Defense Work, dedicated to the 71st Anniversary of the Soviet Army and Navy, has begun.**

Our correspondent, Col V. Gavrilenko, discusses this event in the life of DOSAAF, with Col Gen N. Kotlovtssev, chairman, DOSAAF Central Committee.

"The tradition of conducting month-long campaigns," stated Nikolay Nikiforovich, "goes back to the 1930s. Then, at the initiative of workers at the Moscow Dinamo Factory, the first such campaign was carried out. Its main task became preparing youth for military service, and for defense of the fatherland. This noble task remains unchanged today. Therefore, the main objective of the campaign is to give each organization of the defense society a new impetus of practical work, which helps strengthen the defense capability of the country."

[Gavrilenko] What will take place during this month in the country's DOSAAF organizations?

[Kotlovtssev] It will be filled with matters customary for the society—work on the military-patriotic and international upbringing of young people; their professional orientation on military specialties; and the broad involvement of young men and women in technical types of sports, and sports with military application. Strengthening of the patronage ties with Soviet army and navy units and ships, and familiarity with military equipment and weapons, will continue. And there will many, many other things, more than I can enumerate.

[Gavrilenko] And what, Nikolay Nikiforovich, are the distinguishing features of the campaign?

[Kotlovtssev] They are dictated primarily by the particularities of our times. Therefore, meetings of candidates for USSR Supreme Soviet deputy, with DOSAAF activists and members, for example, will become an organic part of the campaign. We agreed—and this is also a special feature of the campaign—to reject decisively rigid regulation of measures being taken, and pretense, window-dressing and excessive organization in carrying them out. We will strive to overcome the long existing and therefore obsolete stereotypes in our work, and its archaic methods and forms, which have already led to a substantial gap between military-patriotic propaganda and practical matters. It has become acutely necessary to shift to active dialog, and lively discussions of military-patriotic upbringing, in communicating with young people.

[Gavrilenko] You mentioned stereotypes and archaic forms of work. But has not the campaign itself become to some degree archaic in the activity of DOSAAF?

[Kotlovtssev] I am a new man in the defense society. And also, having, so to speak, taken a fresh look at its life, felt that, yes there is a share of campaign mentality in conducting this "month." I was able to visit a number of our primary organizations and there heard frank admissions: We make noise for a month, and slumber for the other eleven.



[Gavrilenko] So what is there to do, either get rid of it all together, or carry out such campaigns more often?

[Kotlovtssev] Probably neither one. It is easy to get rid of it, but what is there to replace it? Be that as it may, the measures carried out during the course of the month still have propaganda and reference value, and orient DOSAAF activists and members on what they must strive for in their work and what effect to have in the end result.

As for having campaigns more frequently, I think that this cannot be considered seriously, for it no doubt would lead to a decline in the quality of mass defense work, and increase the already substantial amount of pretense and holiday show approach to matters. A holiday is a holiday. It is pleasant, of course, to look at a pretty spectacle, but the young people also need to take part in events, exercises and competitions. And then, I will not be telling you anything new if I remind you that if we wish to enliven mass defense work still more, we must substantially, and perhaps even fundamentally, improve the training material base of society. And here we have more than enough problems. If I begin to enumerate the things we are lacking, you will inevitably ask me what we are operating with. Yes, we are in bad shape regarding automotive equipment, motors and aviation equipment, and pneumatic tools. We are getting out of this situation through the enthusiasm, high technical training, and rationalizing and inventive grasp of our employees. But, if we are to place matters on a new foundation, a modern one, enthusiasm and devotion of mass defense work alone are not enough.

[Gavrilenko] What is the solution?

[Kotlovtssev] The solution is through more extensively and thoroughly involving branch ministries and departments in improving the DOSAAF training material base. We have excellent marksmen, racers, and pilots, but a paltry amount of modern equipment. And we could have much more if aviation, weapons, automotive and machine factories would help us. The whole difficulty is that we are totally unable to overcome interdepartmental barriers. Yes, the production workers agree that models of equipment are needed. But, when matters reach specific commitments, we are immediately sidetracked: "We have our own plans, you understand." And there are so many financial obstacles and impediments!

[Gavrilenko] Nikolay Nikiforovich, I know that you were elected a candidate for USSR Supreme Soviet deputy from the defense society. Seemingly what we have been talking about can become one of the components of your program as a deputy.

[Kotlovtssev] Undoubtedly. Both according to my position, and my conscience, who if not I is there to defend the interests of DOSAAF? And if I am also elected to the

Supreme Soviet, I will absolutely use this high forum as well, and the authority of a deputy, to further improve the activity of our defense society.

### **Problems of Pre-Draft Training in Gorno-Altay Autonomous Oblast**

18010357 Moscow KRASNAYA ZVEZDA in Russian  
26 Jan 89 First Edition p 2

[Article by Maj V. Zimin, officer with the Gorno-Altay Oblast Military Commissariat: "In the Hinterland, in the Old Way: On Problems of Pre-draft Training for the Youth in the Gorno-Altay Autonomous Oblast"]

[Text] It was the formal send-off into the military service for draftees of the Gorno-Altay Autonomous Oblast. At the Glory monument in the Victory city park, where the busts of 25 Heroes of the Soviet Union stand, the band resounded, parting instructions were given by party and Komsomol workers, war veterans and reservists.... The draftees themselves also spoke. They promised to carry out the instructions and become bold soldiers.

Apparently no one present at the formal send-off doubted that was just the way it would be, that the young men would fulfill their military duty in a worthy manner. An alarming thought gives me no peace, however: It would be very difficult for a great many of them to master military affairs. After all, the vast majority of draftees do not possess the knowledge and skills demanded by the military service. They did not acquire them in the initial military training at schools and other educational institutions. Even the brief test there was time for showed that few of the young men were certain of themselves with the athletic equipment, in the initial fire training and tactics.

As in previous callups, the young men from remote rayons, where the vast majority of the autonomous oblast's indigenous population live, are particularly poorly prepared for the service. And this should not be surprising: initial military training is conducted at a low level at many schools. The main cause is a lack of the necessary training facilities. Only 20 percent of the oblast's educational institutions have a modern NVP [initial military training] facility. In the rural area obstacle courses are a rarity, and there is no such thing as rifle ranges in Kosh-Agachskiy, Ulaganskii, Ongudeyskiy and Turachakskiy rayons.

I frequently recall a meeting of the oblast party and management aktiv 2 years ago, which discussed questions having to do with improving the pre-draft training of the youth. All of the speakers mentioned the importance of this training, all of them spoke out for the elimination of deficiencies and expressed their readiness to correct the situation. The participants adopted a decision distinguished by preciseness and specificity. The deadline for building the essential NVP facilities was set at 1 September 1988, for example.

Many of us workers with the military commissariats and military instructors took heart at that time and believed that finally things would begin to move. And how could we not believe it?! The CPSU CC and the USSR Council of Ministers had issued the well-known decree which precisely defined the tasks of all the pertinent organizations and agencies with respect to further improving the training of the youth for the service. In light of its demands a meeting of the party and management aktiv was held, at which deficiencies in the pre-draft training, things which had bothered people for a long time, were stated loudly and clearly. Could the most inveterate sceptics have assumed that nothing would change substantially even after that, that the meeting would prove to be a measure conducted for the sake of points, an ordinary simulation of an effective response to a decree "from the center"? This is just how it all turned out, however. If anything changed during those years, perhaps the only thing would be that, with rare exceptions, the few NVP components at schools and special vocational and technical schools became obsolete or even completely unusable.

The military instructors are still forced to teach the youth the basics of military affairs with their hands. And, judging from everything, no improvements are in sight. Contrary to all the requirements, NVP facilities are not specified even for schools under construction. It is planned to build two new schools in Kosh-Agachskiy Rayon, for example, but there is not even a mention of construction of the needed NVP facility in the estimate. This is conservation at the expense of the initial military training. And no one pays any attention.

At meetings with the youth how many fine-sounding statements are uttered about military duty and about how service in the Armed Forces is an honored duty. How embarrassing it is in front of that same youth, however, when they encounter cold indifference during their very first steps in the performance of that duty.

Not long ago I met with E. Kochetygova, director of a school in Kosh-Agachskiy Rayon. She told me bitterly about the endless, demeaning requests which she is forced to make of those in charge of a sponsored [sic] organization, a local mobile mechanized column. And the requests always amount to the same thing: to do at least something to improve the NVP facilities, which do not measure up to any sort of criticism. The mobile mechanized column brushes off the school's petitions like annoying flies, however. School needs receive no better treatment from those in charge of certain ispolkoms.

I recently visited Turachakskiy Rayon and spoke with ispolkom chairman V. Chernykh. The discussion turned to deficiencies in the preparation of the youth for the service and the unsatisfactory state of the NVP facilities.

In the course of the discussion I cited what would be called some glaring facts. And just what did I hear in response? That the military commissariat is to blame for everything.

I certainly do not want to shield workers with the rayon military commissariat. They must see to it that the army and navy are replenished with quality draftees, of course. But who is directly in charge of organizing the preparation of the youth for the service? Who is primarily responsible for that training? Comrade Chernykh gave me to understand that it is anyone but the local agencies of power. Is it therefore any surprise that there is not a single induction center provided with all the essential equipment in the Gorno-Altay Autonomous Oblast or that the military commissariats themselves are crammed into old, dilapidated buildings in which it is not even possible to assemble the draftees?

...Registration of the youth was underway in Choyskiy Rayon. This is an event for a young man. It means that he is only a short distance away from the time when he will enter the ranks of the armed defenders. What does he have to remember this day for, however? It was dirty and cold in the local cultural center where the registration was being conducted, impossible even to take off one's outer garments. It was the same at the Pioneer center in Turachakskiy Rayon, where registration was also being conducted. There was no point in looking for a worker from the CPSU raykom or the rayon ispolkom there. Nor did I meet anyone there from among the Komsomol workers, although an absolute majority of the registrants were Komsomol members. When I met with N. Sukhorukov, first secretary of the Turachakskiy Rayon Komsomol Committee and said that someone from among his colleagues should visit the Pioneer center, he gave me clearly to understand that the rayon committee has more important things to do. Those problems, he said, belong to you, to the military commissariat. So you resolve them....

I know that this situation with respect to everything pertaining to pre-draft preparation exists not in our oblast alone. It has become just about universal to "flay" workers with the military commissariats for deficiencies in this training. It is as though local party, soviet and Komsomol organs, public education departments and those in charge of the base enterprises have a wait-and-see policy toward this matter. Is it not time to rectify the situation?

It seems to me that in this matter the military commissariats are expected to serve as something like state reception agencies. They should not arbitrarily divorce themselves from the work of improving the youth's preparation for the service, of course, but they should also not take on the functions of others. Their main job is to prevent defects in the form of draftees in poor physical condition and lacking the basics of military affairs from entering the forces and fleets.

How can this be done? It seems to me that one way would be to have each draftee undergo testing for physical conditioning and initial military training during the

period of his induction into the service. A standardized program containing a mandatory group of test questions and norms would have to be developed for this.

**Border, Internal Troops Officers' Schools Invite Applications**

*18010396 Moscow KRASNAYA ZVEZDA in Russian  
19 Feb 89 First Edition p 1*

[Unattributed article under "For Those Who Are Choosing an Occupation" rubric: "Service Schools Are Calling"]

[Text] Here they are training officers of the border troops:

**Higher Border Military-Political Red Banner School Order of the October Revolution of the USSR KGB imeni K. Ye. Voroshilov** (143040, urban-type community Golitsyno, Odintsovskiy Rayon, Moscow Oblast);

**Higher Border Command Red Banner School Order of the October Revolution of the USSR KGB imeni F. E. Dzerzhinskiy** (480075, Alma-Ata, 75);

**Moscow Higher Border Command Red Banner School Order of the October Revolution of the USSR KGB imeni Mossoveta** (129328, Moscow, I-328).

The period of instruction is 4 years.

The military-political school trains officers with a higher military-political education. At the recommendation of the political authorities of military units or rayon (city) Komsomol committees, the school admits Komsomol activists, public workers and those with labor experience.

The graduates of the military-political school are issued a diploma of the All-Union type with the awarding of the grade of officer with a higher military-political education.

Those completing the command schools are issued a diploma of the All-Union type attesting to a higher education.

And [here they train] officers of the internal troops:

**Higher Political School imeni 60-letiya VLKSM of the USSR Ministry of Internal Affairs** (198075, Leningrad, 75);

**Novosibirsk Higher Military Command School of the USSR Ministry of Internal Affairs** (630114, Novosibirsk, 114);

**Ordzhonikidze Higher Military Command Red Banner School imeni S.M. Kirov of the USSR Ministry of Internal Affairs** (362005, Ordzhonikidze, 5);

**Perm Higher Military Command School of the USSR Ministry of Internal Affairs** (614108, Perm, 108);

**Saratov Higher Military Command Red Banner School imeni F.E. Dzerzhinskiy of the USSR Ministry of Internal Affairs** (410023, Saratov, 23);

**Kharkov Higher Military Rear Services School of the USSR Ministry of Internal Affairs** (310021, Kharkov, 21).

The period of instruction in the schools is 4 years.

The military-political school trains political officers of the company echelon with a higher military-political education. They are admitted to the school at the recommendation of the political authorities of military units and rayon (city) Komsomol committees. The school accepts only candidate members of the CPSU and Komsomol members. The graduates are issued a diploma of the All-Union type with the awarding of the grade of officer with a higher military-political education.

Those finishing the command schools are issued a diploma of the All-Union type with the awarding of the grade of instructor of basic military training; the Kharkov Rear Services School awards the grade of engineer for the maintenance of motor vehicles, engineer for the maintenance of armament, and engineer-economist.

### Discussion of Western Development of Fuel-Air Explosives

18010405 Moscow ZNAMENOSETS in Russian  
No 12 Dec 88 p 31

[Article by Col I. Karenin under rubric "In NATO Armies. (From materials in the foreign press)": "Fuel-Air Explosives"]

[Text] The American journal U.S. NEWS & WORLD REPORT, closely connected with military-industrial circles, recently informed readers that now, when negotiations are being conducted to reduce strategic offensive weapons by 50 percent, a race for new weapons has begun without fanfare.

Among the lines along which developments are being conducted, the journal singled out one—it talked about a "reinforced," or a fuel-air, explosive. In destructive action and effectiveness, fuel-air explosives, as foreign military specialists believe, can be compared with low-yield nuclear charges. The principle of their action is based on the occurrence of a detonation that arises in mixtures of fuel gases and air. Examining this effect, Western specialists draw an analogy with accidental explosions that occur at times in chemical enterprises, in grain elevators, in granaries, and coal mines, and also during the transport of highly flammable and volatile substances. In a room, car or other closed space, a fuel-air cloud forms under certain conditions, detonating from an accidental spark and causing extensive damage as a result.

By virtue of their destructive properties, fuel-air explosives can be employed as a means for striking uncovered and poorly protected manpower, combat equipment and fortified structures, for making gaps in minefields, for clearing and preparing troop assault and helicopter landing areas, for the destruction of buildings, for combat with surface ships, etc.

The first successful tests of fuel-air explosives were conducted in the U.S. in 1960. Nine years later, American aviation was already employing the series model 500-pound GBU-55 fuel-air cluster bomb unit during the aggression in Vietnam (photo below). Structurally, it consisted of three cylindrical canisters weighing 45 kilograms each and filled with a charge of liquid ethylene oxide.

The cluster bomb units of the American militarists were used principally for clearing sites for helicopter landings or for making lanes in minefields. After dropping the bomb from a helicopter or a slow-flying aircraft, the bomb broke apart, and each canister descended on its own parachute. At an altitude on the order of 9 meters from the surface of the ground, the canisters blew up, and the liquid in them dispersed, forming a gas-air mixture. Afterwards, with the help of a special device, the explosion occurred. It was accompanied by a powerful shock wave. The excess pressure at its front reached

about 30 kg/cm<sup>2</sup> at a distance of 15 meters from the center of the detonation, and it was enough to destroy vegetation completely or to actuate mines in an area having a radius of about 20 meters. These same cluster bomb units also proved very effective against unprotected and protected target areas.

The experience with the combat employment of fuel-air explosives in Southeast Asia made it possible to evaluate their effect and also to bring certain shortcomings to light. American military specialists refer, in particular, to the effect of weather conditions. In the event that there is a non-optimal aerosol concentration, which depends on the atmospheric pressure, humidity and temperature of the surrounding air, the presence of wind and other factors, a process of normal burning can take place in the cloud instead of a detonation, and a fuel-air explosion will not occur.

Starting in 1972, the U.S. began the development of second-generation munitions that possessed great explosive energy. To these, the foreign press relates the 500-pound aviation bomb BLU-95 and the 2,000-pound BLU-96 in particular. They can be dropped both from helicopters and high-speed aircraft. One of the variants of the BLU-96 is created for employment as a warhead in the GBU-15 guided aviation bomb (photo to right). An American ground system of mine clearing, a 30-barrel rocket-propelled salvo fire system mounted on a tracked carriage, appeared in the 1970's. Firing is conducted by unguided rockets with fuel-air charges.

About that time the dirty war in Vietnam came to an end. However, command authorities in the Pentagon found it possible to evaluate the effectiveness of new weapons models under real conditions, using one of the hot spots of the globe for this.

In June of 1982, as a result of the impudent aggression of Tel Aviv, which was supported by American imperialist circles, the long-suffering land of Lebanon was turned into a bloody training area by Israeli militarists. Barbarous means for waging war, including aviation fuel-air explosives received from the U.S., were employed against peaceful residents. Both the foreign and Soviet press gave them the designation "vacuum bombs".

At the present time, judging by reports of the Western press, work has been initiated in the U.S. on the creation of third-generation fuel-air explosives. This is persuasive evidence that militaristic circles across the ocean do not intend to face the realities of our days, and that they are escalating the arms race.

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**Initial Commentary on F-117a Stealth Fighter**  
*18010384 Moscow KRASNAYA ZVEZDA in Russian*  
*27 Dec 88 Second Edition p 3*

[Article by A. Mashin, candidate of military sciences, in the column: "In Arsenals and Proving Grounds": "Another Member of the 'Invisible' Family"]

[Text] At a press conference held in November 1988, Defense Department spokesman D. Howard officially announced that the U. S. Air Force is using a fighter employing the stealth technology (which renders the craft less detectable by radar). The fighter was previously known as the F-19. The new airplane is officially designated the F-117a.

The Western press has previously published fragmentary and oftentimes contradictory information on developmental programs for aircraft employing stealth technology. It was emphasized that the work is being carried out in an atmosphere of strict secrecy. As a result, this has given rise to various interpretations of the nature of this activity.

Differing opinions have also been expressed relative to the stealth fighter's state of production. Foreign observers have cited various figures for aircraft in the planned and completed stages. The above-mentioned press conference shed light on this question: So far 52 F-117a craft have been built; plans call for producing seven more by 1990.

Information filtered to the press indicates that there have been three known crashes involving these fighters. Two accidents occurred in July 1986 and one in October 1987. The U. S. Air Force at that time admitted that the crashes had occurred. It released the names of the pilots who were killed, thus indirectly confirming the existence of this kind of craft.

Although the published tactical and technical data on the F-117a are estimates, they do make it possible to arrive at some idea of the design and purpose. It is a monoplane in which the fuselage design is fairly unusual. American experts refer to it as "pyramidal." In this single-seat, twin-engined airplane, the tail assembly is unusual; the plane's configuration is rendered somewhat exotic by massive air intakes and a pointed nose.

Also unusual for a single-seat craft is the design of the canopy, which consists of five windows, judging from the photograph. Foreign experts are of the opinion that the F-117a is intended primarily for reconnaissance and attack missions. It is claimed that the outboard wing sections can be folded to render the craft transportable by the C-5 Galaxy strategic transport.

The fighter's tactical and technical data are: length, 18.0 m; maximum wingspan, 9.65m; wingspan with wings folded, 5.00 m; height, 4.00 m; maximum take-off weight, 15,000 kg; service ceiling, 20,000 m; combat

radius, up to 1,540 km; the craft flies at subsonic speeds. Armament can include air-to-air, air-to-surface, and air-to-radar guided missiles.

The creation and adoption of F-117a stealth fighters is an indication of the Pentagon's interest in attaining definite advantages in the military area.

**Nikitin Examines Role of US Navy in Atlantic**  
*18010340 Moscow KRASNAYA ZVEZDA in Russian*  
*10 Jan 89 First Edition p 3*

[Article by Captain 1st Rank Ye. Nikitin: "Old Postulates of A 'New Strategy'"]

[Text] The year 1989 that has just begun will undoubtedly come under the influence of the truly historical initiatives that were set forth in M. S. Gorbachev's December speech at the UN. The decision to reduce Soviet armed forces, including Soviet forces in the GDR, CSSR and the HPR [Peoples' Republic of Hungary], has aroused a broad response everywhere. It is also perceived as a positive contribution to the resolution of the disarmament problem, and as an important step on the road to the total elimination of a foreign military presence and military bases on foreign territory, which the USSR had already proposed at the third special session of the UN General Assembly on disarmament.

The global "basing strategy" of the U.S. and the dispersion of its Navy over all of the world's oceans, which is fraught with dangerous consequences, convinces us of the pressing need for disarmament. Those are the same bases that, according to a recent report of the Navy's chief of staff, will make it possible "in full measure to turn the capabilities of the West against the Soviet Union," and not against our country alone.

Today we are beginning to publish a series of articles on the U.S. VMS which is located in various regions of our planet.

**The U.S. Navy in the Atlantic**

Much has been written in the United States in recent years to the effect that the emphasis of the American economy and policy, including military policy, has shifted to the Asia-Pacific region. However, it should be kept in mind that this is not being done at the expense of a reduction in naval power in the Atlantic, but as an addition to it. For the Atlantic and neighboring Europe continue to be the main theaters of war for the U.S. and the massive military-political NATO alliance that it heads.

What does the U.S. Atlantic fleet represent?

It has two organizational structures: administrative and operational. The administrative organization of the Atlantic fleet is divided into large strategic formations [ob'yedineniye] and large units [soyedineniye] consisting

of homogeneous forces: submarine, air, cruiser-destructor, marines and routine service forces. Repairs, mission rehearsal and preparation for operations as a component of an operational fleet take place within the homogeneous forces.

The operational (or combat) organization applies to all fully combat ready forces. They are broken down into operational large units [soyedineniye] consisting of ships of various classes, aviation and auxiliaries. The 2d Fleet is the highest operational strategic formation [obyedineniye] of the U.S. Navy in the Atlantic Ocean area. It contains several large, operational units, including attack aircraft carrier and antisubmarine large units, support and other forces. It serves as the basis of NATO's strike fleet in the Atlantic, which is formed from the Navies of the bloc countries for periods during which major combined naval exercises are held. According to data from the foreign press, NATO's strike fleet can have the following composition: a large aircraft carrier task force (3 attack aircraft carriers and 30 escort ships), large antisubmarine units (2 ASW aircraft carriers and 15-20 escort ships), amphibious forces (45 assault landing ships and screening ships, and assault landing forces (22,000 marines).

The creation of a coalition Naval grouping capable of conducting combat operations in regions assigned to them and in accordance with previously developed plans, as is noted in the Western press, entails certain difficulties. Therefore, work is done in peacetime on all questions associated with not only the procedure for transferring the forces of national fleets to NATO and the formation of large units. Particular attention is given to rehearsing the deployment of these forces in operational areas and their employment in various types of wars.

A major engagement has been rehearsed annually in the Atlantic, and more frequently in regions adjacent to the borders and territorial waters of the USSR and other countries of the socialist commonwealth. The latest was the "Teamwork-88" large unit NATO naval exercises in the Atlantic, which were part of the "Autumn Forge" series of autumn NATO maneuvers. Two hundred warships (including aircraft carriers and battleships), 500 aircraft and helicopters, and 45,000 personnel were involved. As the foreign press reported, the "Teamwork-88" exercises were called on to "emphasize the ability of the combined NATO navies in the North Atlantic to practically implement naval strategy for conducting battle in forward areas."

Foreign specialists observe that in wartime the U.S. and NATO navies that are deployed in the forward areas of the Atlantic, are called on to perform the following basic missions: to achieve control of the sea and superiority in the air, to deliver strikes on enemy coastal targets, utilizing both conventional and nuclear weapons, and defense of sea and ocean lines of communication for the purpose of executing the uninterrupted transport of

reinforcement forces to Europe. Additional missions include providing air and ship fire support to ground troops in the Central European and North European theaters of military operations and conducting naval assault landing operations, etc.

The adventurism of the current American "new naval strategy," which was adopted in 1982, very likely, reveals with great clarity how plans are being made to solve the task of achieving control of the sea. American-NATO strategists think the solution lies in the destruction of the enemy's navy, first and foremost submarines, and in barring the deployment of his combatant ships from naval bases and and basing facilities

The battle with submarines is considered to be one of the most important operations in the northeastern region of the Atlantic. It includes the search for them and their destruction at approaches to bases, on deployment routes and in combat patrol areas. Such operations, in the opinion of Western specialists, will unfold principally at antisubmarine lines in the Barents and Norwegian seas: Cape Nord Cap—Medvezhiye Islands; Greenland—Iceland—Faeroes and Shetland Islands—Norwegian coast. The American command authority is planning to deploy a powerful grouping of antisubmarine forces on this line. It is here that it is planned to set up mine barriers.

The particular danger of the "new naval strategy" for the cause of peace is that it is planned to execute an attack on enemy submarines in the early stages of a developing military conflict and even in the so-called threat period. And therefore, the risk of a conflict accelerating into an all-out nuclear war increases sharply. There is not even a hint in this strategy about securing peace in the world and deterrence, about which so much is said in American-NATO headquarters and offices. The term "deterrence" always serves as a cover for dangerous, militaristic plans.

It was President Eisenhower who said: "We must be constantly prepared to inflict more losses on the enemy than he plans to inflict on us. This then will be deterrence." The objective—"to inflict more losses"—still remains the cornerstone of the strategy of "deterrence", particularly in the North Atlantic bordering the Soviet Arctic. There where American-NATO strategists aim to deploy seas-based and airborne cruise missiles to compensate for the elimination of MRBMs and operational-tactical missiles, which would create an additional threat both for the USSR and for all North Atlantic countries.

The operations being planned against the Soviet Navy, together with other dangerous military measures, evoke a well-founded anxiety among the sober-thinking circles of the West as well. THE WASHINGTON POST newspaper observes that current U.S. naval strategy is "so

offensive in the part that concerns its objectives in wartime that it has evoked the disapproval and alarm of defense specialists, and specialists in Congress and in foreign governments."

A gigantic potential for nuclear destruction is concentrated in the American Navy operating in the Atlantic, especially in its northern part. It cannot but have a negative influence on the political climate in the region. Despite the positive changes in the international situation, the continuing militarization of the Atlantic assumes a threatening character, it destabilizes the situation, and it slows down the development of positive trends.

The militarization of this part of the world cannot help but alarm the Soviet Union. Coming out for a radical lowering of the level of military confrontation in the region, our country put forth a number of constructive proposals. They support the idea of creating a nuclear-free zone in northern Europe, and they provide for the conduct of consultations between the Warsaw Pact and NATO organization on reducing military aggressiveness and limiting the scale of activity of navies and air forces in the waters of the Baltic, North, Norwegian and Greenland seas, and also on the application confidence-building measures on them. Among such measures there also could be a treaty on reducing competition in the area of creating antisubmarine weapons, etc.

However, up until now these peace-loving Soviet initiatives practically remain without an answer.

**Nikitin Series on U.S. Navy: Indian Ocean**  
*18010352 Moscow KRASNAYA ZVEZDA in Russian*  
*17 Jan 89 First Edition p 3*

[Report by Capt 1st Rank Ye. Nikitin: "Old Postulates of a 'New Strategy'"]

[Text]

### 3. The U.S. Navy in the Indian Ocean

The Indian Ocean basin with its incalculable natural wealth and enormous human resources has long drawn and continues to draw the attention of the imperialist states. Beginning with World War II the USA has taken increasingly persistent steps to establish itself there with aspirations of being almost the complete boss in the area. Professor R. Paone, one of the American politicians, has stated: "Whoever succeeds in dominating the Indian Ocean region will control the new center of power and have the predominate role in the shaping of policy."

There are a number of circumstances accounting for the fact that the USA is striving so stubbornly to retain and expand its political, economic and military positions in that area. The Pentagon regards the Indian Ocean basin as an area of confrontation with the Soviet Union and the coastal and island states as areas for American

expansion. The Pentagon calls the region, located many thousands of miles from the United States, a "central strategic zone" and a third ocean theater of war, along with the Atlantic and the Pacific. The establishment of a central command element (CENTCOM) of the U.S. armed forces in the area is confirmation of this. The naval forces have been assigned the role of the most important component of this command element.

The American naval forces in the Indian Ocean are made up of ships of the U.S. 7th (Pacific) Fleet. In some cases they are reinforced with ships of the 6th (Mediterranean) Fleet. These forces include one or two multipurpose aircraft carriers (with up to 180 combat aircraft), 2-4 guided-missile cruisers, 9-12 destroyers and frigates, 2-3 nuclear-powered submarines, and support ships. During periods of exacerbation of the situation in the Indian Ocean region (the Iran-Iraq War, for example) the strike forces there have practically been doubled.

Preparing the way for the combat employment of naval and other components of the interventionist Rapid Deployment Force, the American command is building and enlarging the appropriate infrastructure in the Indian Ocean. Its foundation is composed of military bases and support points and similar military facilities linked into a global chain around the entire perimeter of the Soviet Union and its allies.

Naval and air advanced posts in Pakistan, Oman, Somalia and Kenya form a unified complex, as it were, along the ocean's northern and western coastlines. The east passage from the Indian Ocean to the Pacific and vice versa is monitored by U.S. bases in the Philippines. Military bases on Australian territory are used on the southeast sector. Diego Garcia, an island in the center of the Indian Ocean, is the main and universal base, however.

The key base, which is located on that island, continues to be enlarged and improved. It is already capable of receiving strategic bombers and heavy transports and of servicing aircraft carriers and nuclear-powered submarines. Depots of nuclear ammunition and chemical weapons are concealed underground. In the roadstead is concentrated a group of large vessels, floating depots of heavy weapons and ammunition for the Rapid Deployment Force. Foreign experts calculate that the supplies are designed to support the combat operations of an expansionist brigade numbering 12,000 men for a period of 30 days.

People in the Pentagon offices have long been considering the creation of a fifth operational fleet in the Indian Ocean, which would be a sort of permanent link between the 6th Fleet in the Mediterranean and the 7th Fleet in the eastern part of the Pacific. No definite decision has been made on the matter, however. Judging from foreign press reports the USA's financial problems are preventing it from implementing these far-reaching militaristic plans for now.

Using the Iran-Iraq armed conflict as the pretext, however, the Pentagon has succeeded in involving its NATO allies in its adventuristic, militaristic policy in that region. England has sent as many as 10 combat ships and auxiliary vessels to patrol in the Persian Gulf zone, for example. France, which previously kept 8-10 ships in the western part of the Indian Ocean, has increased the number to almost 20. Other NATO nations have also sent to the Persian Gulf ships which were not located there before.

Peace talks are underway between Iran and Iraq. The USA is in no hurry to remove its naval armada from the gulf and the Arabian Sea, however. It continues to serve as a factor destabilizing the political situation in the region, which is evoking determined protests by the local population. "In the Persian Gulf," the NEW YORK TIMES states on the matter, "even those nations which welcomed the American naval presence do not want to see Americans on their territory, a fact based on internal political considerations." The Pentagon has reacted to this in its own way. It believes, the newspaper reports, that the role of naval forces is even greater in this situation, since, unlike the aviation, "they can operate for a lengthy period independent of land bases."

The current U.S. naval expansion in the Indian Ocean basin is an extension of the American "gunboat diplomacy" of the end of the 19th Century. Only the gunboats have now been replaced by aircraft carriers and missile ships. And, unlike the "gunboat diplomacy" of the past, which was limited mainly to a show of force, the force is now being put into play. One needs only to recall the fact that an American warship shot down an Iranian passenger liner with a missile last year, which resulted in the deaths of almost 300 people. In addition to all else, according to the NEW YORK TIMES, the U.S. naval command "regards the experience acquired in the Persian Gulf as a possible pattern for future missions."

The essence of the current "aircraft-carrier diplomacy" was formulated by leaders of the American Defense Department thusly: "It is essential in order to provide support for our ground forces and land-based aircraft, which support forward lines of defense in the theaters of military operations in Europe and Asia. This calls for building up the offensive striking power of our naval forces."

New and perhaps even more alarming circumstances have emerged in recent years to explain why the USA does not want to discontinue militarizing the Indian Ocean with its military fleet. They involve the American program for creating space weapons. The Western press has reported that a Spacetrek station is being built at the Diego Garcia base for guiding assault space weapons to targets. There is also talk of the possibility of basing nuclear-powered submarines there, whose missiles would have special explosive devices making them, according to foreign military experts, one component of the SDI system. Other components of the "Star Wars"

program are American centers on the island of Mahe in the Seychelles Islands and at Alice Springs, Australia, for controlling, tracking and receiving information from military satellites, and the ground complex of the Navstar global satellite navigation system on the island of Reunion.

The mission of turning the Indian Ocean into a peace zone is becoming more and more urgent. The idea has support in India and other nations of the region. In his Krasnoyarsk speech M.S. Gorbachev spoke of the possibility of convening a conference on the Indian Ocean no later than 1990. The Soviet Union has more than once expressed its readiness to reach agreement with the United States and other outside states which have permanently kept combat ships there with a view to significantly reducing their numbers and the activities of the naval forces. For this purpose it has been proposed that talks be conducted with the USA and other concerned nations on steps in the military area to increase trust as applicable to Asia and the adjacent Indian and Pacific oceans. Our nation proposes that agreements be worked out guaranteeing the security of naval and air lines of communication in the Indian Ocean, and so forth. At the same time, the USSR is prepared to discuss also proposals from other nations.

The USA and certain of its allies continue to cling to their position, however. Practically all of Washington's actions demonstrate that it does not want to convene a conference or to turn the Indian Ocean into a peace zone in general. "The Indian Ocean," C. Weinberger, who until recently served as Secretary of Defense, explained this position held by Washington, "is a region in which the terms 'parity' or 'equality' are unacceptable to us."

#### **Technical Review: Western Development of Liquid Explosive Propellants**

*18010342 Moscow KRASNAYA ZVEZDA in Russian  
11 Jan 89 p 3*

[Article by Col. (ret.) V. Malikov: "Not a Single Propellant"]

[Text] Following the new American military-political concept dubbed the "concurrent strategy", both the U.S. itself and the NATO countries are paying a great deal of attention to improving existing conventional weapons and developing new types. In the list of prospective developments, an important place is assigned to weapons systems that use new physical principles. In particular they are studying the technical potential for replacing traditional powder with new propellant materials.

In the assessment of leading U.S. specialists, the adoption of liquid explosive propellants (LEPs) in the artillery may promote the development of guns with qualitatively new capabilities. It is thought that liquid propellants allow control of gas formation in the firing



process and that this makes it possible flexibly to regulate the range of fire without changing the angle of laying for elevation, and rules out excessive expenditure of propellant when changing range.

Foreign specialists believe that in contrast to conventional powder charges, LEPs can be carried in tanks of any shape mounted in the joints of the armored hull and other areas of the tank or self-propelled artillery gun (see photo). And this makes it possible to increase the ammunition carried and raise the fire power of the artillery weapon.

Analyzing the situation, foreign experts concluded that eliminating the shell cases reduced expenditures associated with their production, supply, and repair, and will lead to a significant savings of production floor space and reduction in material expenditures for ammunition manufacture.

The journal *MILITARY REVIEW* notes that replacing powder charges with LEPs simplifies storage, transport, and preparation of ammunition for fire. It also notes that the construction of automatic loaders, which help to increase rate of fire and reduce wear of gun barrels, will become simpler.

It should be said that the very idea of LEPs is not new. The first proposals to use nitromethane as a propellant charge came in the 1860s. The prominent theoretician and talented experimenter and professor of the Mikhaylovskiy Artillery Academy L.N. Shishkov, studying the possibility of using powder, mercury fulminate, and other explosive materials in artillery, showed the feasibility of using nitromethane as a monopropellant fuel for artillery shells as early as 1861.

Subsequent work to invent pyroxylin (1884), nitroglycerine (1888-1889), and collodion (1891) powders lessened interest in conducting further studies on the potential of LEPs. The Soviet scientist I.P. Grave (1874-1960) made a vital contribution to theoretical studies on the characteristics of internal ballistics of artillery guns using LEP.

In our day the increased interest in the use of LEP instead of powder may be explained by the fact that many liquid materials release significantly more energy during combustion than do contemporary powders. Thus for instance the combustion of a single kilogram of gasoline releases 10,000 kilocalories, while the combustion of a single kilogram of smokeless powder releases just 800, less than one tenth as much.

According to reports from the *DAILY NEWS*, one of the foreign experimental units using LEP achieved a shell velocity of 3,000 m/s. The LEP charge was placed behind the projectile and a piston that moved freely along the bore. The combustion chamber was behind the piston. Fuel was sent to it through an annular nozzle formed between the piston and the wall of the breech chamber.

According to foreign press reports, LEPs may be divided into two classes: monocomponent (hydrazine, hydrazine nitrate) and bicomponent (oxidizers: nitric acid, hydrogen peroxide; and fuels: monomethyl, hydrazine). Oxidizer and fuel belonging to the bicomponent LEPs (BCLEP) may in combination form a spontaneously combusting mixture. If kerosene or octane is used as the fuel, then an outside source is needed for ignition of the LEP.

Basically pyrotechnic compounds or a spark discharge are used for ignition of the LEP. There are studies on the use of heaters, ultrasound devices, plasma, and chemical compounds for this same purpose.

The foreign press points out that the basic difficulty in developing artillery guns based on the use of LEP is ensuring the correct dosage to obtain a given range of fire and the required accuracy. It is noted that one of the methods of possible increase in projectile velocity is the development of a so-called movable LEP charge. Observers note that in this method the LEP burns closer to the base of the projectile, with the result that it achieves great effectiveness in converting the chemical energy of the fuel into the kinetic energy of the shell.

According to statements of representatives of the American Army Ballistics Research Laboratory, present-day attainments in LEP technology make it possible to use them in tank guns and self-propelled howitzers. It is claimed that guns using LEPs may be smaller, and tanks and self-propelled guns faster and consequently less vulnerable.

They cite the example of the M109A2 self-propelled howitzer, which uses an equivalent charge in the form of a 200-liter container of liquid fuel, making it possible to eliminate a loader from the crew and increase the rate of fire and safety during technical maintenance and delivery of fire.

As a result of tests conducted with four 155-mm howitzers using LEP, the U.S. Army Command found that the carried ammunition on a self-propelled gun may be doubled, that the automated loading process is simplified, and that rate of fire is increased (thanks to simultaneous, rather than successive, feeding of the round and charge components). According to press reports, the results of fire showed that for guided rounds of the Copperhead type fired from guns with regenerative LEP feed, it is possible to extend the range by 20 percent.

Leading foreign specialists express the opinion that what has been achieved in the field of LEP use has outstripped the level of development of guns using electromagnetic projectile acceleration, upon which great hopes have been placed for the destruction both of ground and aerial targets. Incidentally, engineers and specialists working to develop electromagnetic guns in turn recall that the General Electric Company has still not succeeded in



creating an acceptable "liquid propellant" for artillery guns on its basis that could be immediately adopted. Nevertheless the Pentagon continues to finance both projects.

According to the assessment of foreign specialists, artillery guns using LEPs are systems of new-generation weapons, and intensive, full-scale theoretical and experimental research is required for their final development.

According to forecasts by American military specialists, artillery guns based on LEPs, should they be perfected, may find broad use in various weapons systems capable of performing many tactical and operational-tactical missions. All this graphically reflects the desire of the Pentagon to use the attainments of modern technology to develop new weapons models and ensure U.S. military superiority in the field of conventional types of arms.

**Operation of NAVSTAR System Detailed**  
*18010171 Moscow KRASNAYA ZVEZDA in Russian*  
*25 Jan 89 p 3*

[Article by A. Alekseyev, candidate of military sciences: "Coordinates Across the Cosmos—How the Pentagon Envisions the Capabilities of the NAVSTAR Radio Navigation System"]

[Text] Accuracy of navigation on land, at sea and in the air—these are the requirements that military and civilian specialists set as paramount when they discuss the Omega, Loran and Transit navigation systems. Today special importance is being placed on coordinate and time support of the forces. Foreign observers note that this also necessitates creating a radio navigation system that will provide not only highly accurate and continuous determination of the location of mobile and fixed objects along three coordinates at any point on the earth, but will also make it possible to determine the movement parameters of these objects.

Since the beginning of the 1970s, in the U. S. priority in development of radio navigation support equipment has been given to the NAVSTAR satellite system. It is to have in its composition a main control station in Colorado Springs, Colorado, five control stations and three antenna systems. The orbital portion, the foreign press reports, is to consist of 21 satellites (18 will function continuously in an active regime, and three in a reserve regime). Plans are for seven satellites to be in reserve on earth, three of them in continuous launch readiness.

It is planned that the satellites of the NAVSTAR radio navigation system will be located in six groups in near-circular orbits, with a dispersion of 60 degrees at the equator, an altitude of more than 20,000 kilometers, and a 12-hour period of revolution. American specialists believe that such a disposition will make it possible,

from virtually any point on the earth, at any moment in time, to have from 6 to 11 satellites in the zone of visibility (with an angle of elevation of more than 5 degrees above the horizon).

To determine the coordinates and parameters of movement, say, of a ship or submarine, it is necessary to receive signals from four satellites that have the most favorable disposition with respect to the user. Selection of these satellites is accomplished through the use of an on-board computer apparatus.

In general, the functioning of NAVSTAR can be viewed according to the following scheme. Once a day a navigation report is transmitted to each satellite in the system from the main earth station. This report contains the precise ephemeris parameters of the "main" satellite, as well as less precise ephemeris parameters of the remaining satellites, parameters for adjusting the satellite clocks, and certain other data.

The satellites transmit navigation signals, which are received by an on-board receiver-indicator apparatus, or as it is called, a "user apparatus," and are processed. Each navigation signal lasts 30 seconds and contains 1,500 bits of information. The signals are transmitted on two carrier frequencies (a main frequency of 1,575.42 megahertz, and an auxiliary frequency of 1,227.6 megahertz).

For transmission of a navigation signal, both carrier frequencies are phase modulated by so-called pseudo-noise codes of approximate and precise measurements.

The precise measurement code is a sequence of 0 and 1 combinations. The combinations are retained for a week, after which they are changed. The clock frequency of this code (frequency of the shift from 1 to 0) is 10.28 megahertz.

This code is very precise, but the search for it and selection, note foreign specialists, are fraught with great difficulties. Therefore, first the search and selection of a code of approximate values is conducted. Subsequent processing of the signals that have been received and shaped makes it possible to conform them with an accuracy of up to one nanosecond. Theoretically, this makes it possible to determine the distance between the satellite and the user within 30 centimeters.

Besides measuring the distance to satellites, the speed and direction of movement of the user itself can also be determined.

In processing data from four satellites, four distances and four speeds of change in distance are determined simultaneously. This makes it possible not only to calculate three coordinates of the location of the user, but also its speed and acceleration; i.e., "departure," and the speed of "departure" of its clocks.

Plans are to have two rubidium and two cesium frequency standards onboard each NAVSTAR system satellite. The time of all elements of the radio navigation system is to be synchronized with the reference time. The main earth station accomplishes this task.

According to the journals *FLIGHT* and *INTERAVIA*, plans are to purchase more than 27,000 sets of the NAVSTAR radio navigation system apparatus for the needs of the U. S. Armed Forces. They are to be mounted on airplanes, helicopters, submarines and surface ships, and armored equipment, and are also to be used in a portable variant by individual infantrymen in the regular forces or diversionary groups.

Results of tests of the experimental version of the NAVSTAR system have also been reported. Using one satellite and three earth stations, the coordinates of an F-4 airplane flying on a closed trajectory 52 km in length, at a speed of from 587 to 740 km per hour, at altitudes of from 600 to 1,500 meters, were determined. The precision of the measurements turned out to be sufficiently high—within three meters—and the mathematical expected error for each coordinated determined was approximately one meter.

The capabilities of the NAVSTAR systems for controlling aircraft as they move to a refueling area were also studied. In one of the test flights, C-141 and F-4 airplanes, using navigation signals received from satellites, closed to a distance on the order of 20 meters. In the opinion of foreign specialists, the NAVSTAR system can also be used to support the landing approach of airplanes and helicopters.

At the same time, observers note that the texts disclosed a number of shortcomings, including low reliability and maintainability of the apparatus, as well as certain design defects. Specialists assessed that full scale production of the apparatus will begin in 1989.

It is believed that, with the joint use of the satellites of the experimental and operational NAVSTAR systems, global coverage of space by a radio navigation field will be provided by 1990, and foreign experts hope that coordinate-time support of the forces at virtually any point on the earth can be achieved by 1991. This is how the Pentagon views the capabilities of the new navigation systems.

#### **Wehrkunde Munich Conference Yields Mixed NATO Reaction to Force Reduction**

*18010361a Moscow KRASNAYA ZVEZDA in Russian  
1 Feb 89 First Edition p 3*

[Report by M. Grigoryev under the rubric "Military-Political Commentary": Once again, 'Modernization' Plans"]

[Text] The Wehrkunde Scientific Military Association has just wrapped up its 26th annual conference in Munich, FRG. For 2 days high-level representatives and around 200 leading experts of the North Atlantic bloc discussed future NATO military policy in the contemporary situation.

The results of the conference were eagerly awaited in both the West and East. After all, for the first time since the announcement by the Soviet Union and other Warsaw Pact states of a unilateral reduction of their armed forces and weapons, the North Atlantic bloc had a real opportunity to publish a coordinated point of view on those decisions and an opportunity to work out their own position in the area of disarmament.

Unfortunately, a study of statements made at the conference shows that the NATO leadership perceives in a very strange way the steps taken by the socialist states to reduce the danger of war. M. Werner, general secretary of the bloc, for example, after describing the unilateral reduction of Soviet Armed Forces as significant progress, then essentially attempted to downplay their significance. Moreover, he based this on an alleged "weak and inadequate" response by the Soviet side to the policy of disarmament ostensibly conducted by the West. An equally unproductive position was taken by recently appointed [sic] U.S. Defense Secretary J. Tower, who called upon the NATO nations to continue to maintain "healthy skepticism" with respect to the steps taken by the Soviet Union to improve the international situation.

One has the impression that most of the participants in the Munich conference had no intention of developing a constructive response to the initiatives of the socialist states. They had a different mission: to convince all of the NATO nations of the need to retain the NATO strategy of "nuclear deterrence." This problem has long been at the center of attention of the political and military leadership in the West. According to the American magazine *U.S. NEWS AND WORLD REPORT*, there are even certain disagreements among the NATO members on the matter of whether "nuclear deterrence" should continue to be a key element of the West's defense. According to data published in the magazine, Denmark, Belgium, the Netherlands and Spain believe that the North Atlantic bloc must make the removal of nuclear weapons from Europe a "long-range goal."

Naturally, such concepts produce concern in the USA, Great Britain and France, which have rejected any possibility of completely eliminating this type of weapons of mass destruction. Furthermore, active attempts are presently being made in those nations to erect barriers to disarmament and to "modernize" their tactical nuclear weapons. According to information leaked to the press, a draft document entitled "An All-Encompassing Concept," is being prepared in the United States and Great Britain, which will define the main directions for this "modernization." The U.S. Congress intends this very year to allocate the 50 million dollars necessary to create experimental models of weapon systems to replace the Lance missiles.

The proponents of "modernization" of NATO's nuclear arsenal use the far from new thesis of the Warsaw Pact's alleged superiority in conventional weapons as an argument supporting their point of view. It is backed up with

two or three individual figures taken out of the general context of the distribution of forces in Europe, thereby distorting the real situation. Data published in the statement of the Committee of Defense Ministers of the Warsaw Pact States make it perfectly apparent that the NATO calculations are biased. The former leave no doubt that the military balance in Europe, when all of its components are considered, can be described as approximate parity, which prevents either side from counting on decisive military superiority. It was with good reason that E. Bahr, leading expert for Germany's Social Democratic Party, who spoke at the Munich conference, sharply criticized the striving by the NATO strategists to "modernize" the tactical nuclear weapons. To him, this is a deception of the progressive community, since it actually involves a new round of the arms race and the creation of improved and more destructive nuclear systems.

An officer serving at NATO Headquarters once joked about the demands put forth by Washington and London for "modernization" of the bloc's tactical nuclear weapons: "Even if the Russians were to attempt collective suicide, some people here would still call for the creation of new short-range missiles." The results of the conference of the Wehrbunde Scientific Military Association demonstrate that there is a certain element of truth in this joke.

#### **Examination of Reform in Chinese Armed Forces, Defense Industries**

*18010361b Moscow SOTSIALISTICHESKAYA  
INDUSTRIYA in Russian 1 Feb 89 p 3*

[Article by Yu. Tavrovskiy: "Swords Into Plowshares: They Are Learning How to Reforge China's Armed Forces and Defense Industry"]

[Text] For 10 years now China's billion people have been reforming the most diverse aspects of their life. Nor has the reform skipped the military-industrial complex, which was assigned an inflated role by Mao Zedong. The latter proclaimed that "the rifle gives birth to power" and demanded preparations for "large-scale nuclear war within a short time." The nation's military budget accounted for one fifth of the state budget under him. Thousands of enterprises produced military equipment and munitions, frequently extremely obsolete models.

The incompatibility of the obsolete strategy and the strategic plan for all-around reform became clear to the new Chinese leadership headed by Deng Xiaoping as early as the 3rd Plenum of the CCP CC, 11th convocation, in December 1978. It went down in the nation's history as a turn from Mao's dead-end street onto the path of renewal. As early as then it was decided to conduct a far-reaching reform in the army and take a "strategic turn in the organizational development of the armed forces." Several years were spent analyzing national security problems and working out specific measures. The political scientists and military leaders arrived at the conclusion that the main threat to national

security came not at all from outside, but from the rapidly increasing gap between China and the world's leading powers in "aggregate strength." Along with military capability, the main components of that strength were recognized as the level of science and technology and the quality of the economic structure and labor resources.

A time of more resolute action arrived toward the mid-80s, when Beijing made the decision to reduce the military by a million men, or one quarter of its personnel, within a 2-year period. It is not planned to further reduce the CPLA [Chinese People's Liberation Army], but the course of reducing expenditures and increasing the revenues of the armed forces continues.

Military items in the state budget were halved during a 10-year period, from 17.5 percent in 1979 to 8.7 last year.

It appears that new and major steps are not far off. Calling for "the army to be placed under the immediate command of the government and a merging of the Military Council of the CCP CC with the Military Council of the CPR State Council," the newspaper CHINA DAILY stressed the fact that the "defense budget should be subordinate directly to general state plans for economic development and not exist separately from them, as was previously the case. The defense budget is actually a part of the state budget, and its application should be coordinated with the nation's economic activities."

But just how, in this situation, are the armed forces and defense industries managing to increase their revenues? Weapons trade was the simplest method. China has exported weapons for decades. Previously, however, military equipment was regarded as a form of aid and was simply turned over to friendly governments (and frequently, to anti-government organizations). The weapons are now being sold, although at prices below those of the world market. According to American calculations, the weapons trade earned Beijing more than 11 billion dollars during the period 1980-1987. Chinese exhibits are to be found at international munitions shows, and the Aziandex Asian exhibition of defense technology has been held in Beijing since 1986.

Versions of Soviet tanks, improved by the Chinese and cheaper than comparable Western models, are in great demand. The Qiang fighters, transport and training vehicles are also popular in the developing nations. Chinese small arms, armored personnel carriers, artillery pieces and mortars have earned a fairly good reputation. The experts calculate that missile exports produce the greatest income, however.

Annual revenues from the trade in Chinese weapons are estimated at 1.34 billion dollars. The currency earned goes primarily for purchasing modern military technology and equipment abroad. Some of the money is designated for maintaining the personnel and improving living conditions.

It can be concluded from information published in the Chinese press that the weapons trade will expand. The influential Shanghai newspaper SHIJIE JINGJI DAOBAO has stated that "China can easily earn 5-10 billion yuans annually from sales of weapons." The newspaper even called for "there to be two systems within one army"—that is, to have an "industrial army" in addition to the regular army, which would be responsible for increasing weapons production and expanding the weapons trade so that the CPLA would not be entirely dependent upon state budget funds.

An "industrial army" has essentially always existed and operated within the CPLA. The railway troops laid steel mainlines, construction corps developed thinly populated areas (Xinjiang, Inner Mongolia and others), and military construction workers built the Beijing metro, bridges, highways and apartment buildings (2.2 million square meters of housing was completed for occupancy from 1981 to 1984 alone). Military personnel helped build or reconstruct highly important industrial facilities: more than 40 metallurgical combines and plants. It is an interesting fact that more than 20,000 CPLA soldiers and commanders were among the first construction workers when the Shenzhen Special Economic Zone (SEZ), China's first, was begun in 1980.

But all of those undertakings were not so openly commercial and not of such a large scale as those implemented during the past 5 years. Since 1984 military units have helped build around 20,000 facilities for the economy. The CPLA has completed for nonmilitary purposes 59 airports, more than 300 railway lines, 20 maritime ports and more than 100 large depots. Military airfields are presently used by around 70,000 civilian aircraft annually, for example. Aircraft of the military transport aviation haul passengers and civilian cargo. During the period 1985-1987 CPLA vessels and aircraft hauled around 90 million tons of commercial cargo. Military specialists have provided healthy competition for the civilian medical workers, building military hospitals for the population. Unoccupied barracks in military units and at military staging points have begun operating as hotels. More than 200,000 Chinese and foreign tourists stay at military staging points of the Xinjiang Military District each year, for example. The guests have the use of pay telephones, receive treatment in medical battalions, can be photographed and receive help with vehicle repairs. Movies and video films are shown and dances are held for the tourists.

Two thirds of the enterprises in China's military-industrial complex are already producing goods for sale on the domestic market. The portion of civilian products

accounted for 38 percent of the gross output of those enterprises in 1986. The Shanghai Communication Equipment Plant is a typical positive example. In 1961 it was converted from the production of civilian radios to the manufacture of parts for satellites and missile tracking systems. In 1979 the plant began producing television sets. A total of 600,000 sets were sold in 1987 for a profit of 8.6 million dollars. It is planned to enlarge the operation and begin producing microcomputers, home antennas for receiving television programs from communication satellites, and videotape recorders.

There are also negative examples: Machine-Building Plant No. 541 in Shanxi Province, with 17,000 workers, went bankrupt because it had no profitable operations for producing civilian goods. The plant was absorbed by a large civilian industrial association, and the machine-building minister warned that this step should serve as a lesson for the entire defense industry.

The Chinese government has set up several industrial trade concerns to coordinate the production and sale of military equipment and consumer goods for export and for the domestic market. The best known are NORINKO, Great Wall Industries and Polytechnology, whose management includes senior officers of the CPLA General Staff and Rear Service Directorate. NORINKO, for example, exports its products to more than 70 nations and has trade offices even in Hong Kong. The concern includes approximately 160 defense enterprises with a total of more than 700,000 workers. The concern enjoys the same rights to operate in the foreign market as the provincial people's governments.

The reform of China's armed forces and its military-industrial complex continues. Its experience is of interest to all nations which have decided to reforge swords into plowshares.

#### **Lazarev on Reports of Possible Japanese CW Facility**

*18010381 Moscow KRASNAYA ZVEZDA in Russian  
10 Feb 89 First Edition p 3*

[Article by APN commentator A. Lazarev special for KRASNAYA ZVEZDA: "The Secret of the Island of Okunoshima—Japan Does Not Reject Chemical Weapons Even Today"]

[Text] The small island of Okunoshima is lost among dozens of similar patches of dry land in the Setonaikai—the Japanese Inland Sea—dividing the islands of Honshu, Shikoku and Kyushu. One can assert boldly that until recently there were few people in Japan who knew of the existence of this island. The fact is that the island, although its dimensions are not all that small, could not be found on even the most detailed map of Japan. In 1930 Japanese sailing directions indicated that the region was closed to navigation. Local fishermen also tried to keep far from its precipitous shore. Police patrols



strictly saw to it that there was no one in the closed zone aside from local inhabitants. They lowered the blinds on trains passing through this area along the shore of the Setonaikai.

The island continued to be shrouded in secrecy for many years. Only quite recently has the name Okunoshima appeared in the pages of Japanese newspapers. This was caused by the fact that the first and only museum of chemical weaponry in Japan was opened on the island. As was related to me by its Director Mr. Murakami, the desire of the Japanese authorities to keep the existence of this corner of Japan secret was caused by the fact that in the 1930s and 1940s a secret plant for the production of chemical munitions was operating here.

In other words Japan, which signed the Geneva Protocol in 1925, was among the countries fighting for a ban on chemical weapons, while in deed, the Japanese militarists could not resist the temptation to have their own cheap but extremely "efficient" weapon. Up to 1,200 tons of lewisite, mustard gas and other poisonous combat substances were produced on Okunoshima.

The production of chemical weapons in and of itself was not a violation of the Geneva Protocol of 1925. This international document, after all, banned only the use of poisonous combat substances. But Japan did violate the protocol. The Japanese Imperial Army actively tested chemical weapons on people and used them widely in combat operations. Some 26 experimental centers for studying the destructive power of chemical and bacteriological weapons staffed by over 10,000 people were spread across Manchuria and China. The atrocities of the Japanese "doctors" from Detachment 781 based near the Chinese city of Harbin have become widely known to world society. World society, but not Japanese society. The Japanese Ministry of Education still will not permit mentions of Detachment 781 and the plant on the island of Okunoshima in history textbooks under the pretext that these data are "not yet adequately proven." Japanese researchers meanwhile acknowledge that a minimum of 2,000 people perished and 35,000 Chinese soldiers were seriously wounded as a result of the application of chemical munitions by the Imperial Army.

The reluctance of Japanese authorities to make public the documents on the scope of the application of chemical weapons by the Japanese Army on the eve of and during the war in the Pacific testifies more than a desire to conceal the dark pages of the history of the country. Scholars and journalists have repeatedly expressed the opinion that the list of violations of the Geneva Protocol of 1925 is not exhausted by the history of Okunoshima.

The United States, as is well known, protected many Japanese war criminals, including some who were connected with the production and employment of chemical weapons, from their just retribution. They transferred all documentation on this type of weaponry to the Pentagon instead. Many Japanese chemists and bacteriologists

moreover moved to the United States, where they continued to work "in their fields." This could probably be considered the first instance of the exchange of military technology between the United States and Japan.

Today the Pentagon and NDF [National Defense Forces] are conducting joint studies in the course of which they are developing various methods for handling poisonous substances. Two years ago the Japanese press (very timidly, it is true) acknowledged that the Japanese "Self-Defense Forces" have included in their tactics operations under the conditions of the use of chemical weapons. The corresponding chemical subunits have been introduced into every Japanese division. Gas masks and special rubber capes have been issued to each soldier. The naval vessels of Japan have been equipped with special degassing and decontamination equipment since 1988. Matters are unfortunately not limited only to anti-chemical protection measures. At one time, referring to NDF sources, the newspaper MAINICHI wrote that toxic gases are considered by the military department to be an ideal weapon for use during the course of regional conflicts and that they are even considering the question of equipping the land, naval and air forces of the country with such weapons "as a countermeasure."

The same MAINICHI in September of 1988 quoted the statement of a Japanese writer and historian occupied with the World War II period, Hisashi Yamanaki, that "the possibility that this research (on the production and employment of chemical weapons) continues through the present and that the government of Japan is striving to keep it secret cannot be ruled out."

An international conference to reinforce the conditions of the Geneva Protocol of 1925 on a ban on the use of chemical weapons was held in Paris on January 7-12. One would like to believe that the position of Japan, a representative of which also took part in this conference, will be more consistent in the future than it has been thus far.

#### **Commentary On NATO 'Cold Winter-89' Exercise**

*18010425 Moscow KRASNAYA ZVEZDA in Russian  
5 Mar 89 First Edition p 3*

[Article by Col P. Yakovlev: "A 'Cold Winter' in Northern Europe"]

[Text] The leadership of the North Atlantic Bloc gave the order to begin new large-scale maneuvers. For this once in the north portion of the European continent. According to Western press reports, two-sided exercises of the Bloc's combined armed forces will take place here from 3 to 22 March under the code name "Cold Winter-89" ["Kholodnaya Zima-89"].]

The main purpose of the training is to work out problems of organizing and conducting the first operations of the initial period of war on NATO's northern flank against



the Warsaw Treaty countries using conventional weapons. NATO allied armed forces staffs, units and subunits of the ground, air, and naval forces of Norway, the United States, Great Britain, and the Netherlands are taking part in "Cold Winter-89." More than 17,000 servicemen, 100 helicopters and aircraft, approximately 100 field artillery pieces and up to 90 tanks have taken part in the exercise.

Preparations for the exercise began ahead of time. In January, British and Dutch Marine subunits were airlifted to northern Norway where they underwent acclimatization and training for conducting combat operations under Arctic conditions. Afterwards, American troop subunits were also airlifted to Bardufoss Air Base. Besides that, the "[HMS] Intrepid," a British Navy helicopter landing-assault ship, arrived at the Norwegian port of Trondheim to support an amphibious assault landing.

They plan to conduct training in three phases. During the first phase (from 3 to 7 March), a review of deployment plans of units and subunits participating in the exercise will be carried out in their areas of operations. During the second phase, 8-13 March, they plan to work out the issues of organizing an amphibious assault operation and conducting an anti-amphibious assault defense of the coast of Northern Norway. A combined amphibious assault landing consisting of an Anglo-Dutch Marine Brigade will be carried out using amphibious assault landing craft and transport-assault helicopters.

And, finally, during the third phase, 13-22 March, training results will be summed up and troops will be airlifted to their permanent deployment locations.

The scenario of the current NATO exercise is not new. The armed forces of the Warsaw Treaty countries are traditionally assigned the role of "aggressor" and, with air and naval support, succeed in crushing NATO troop resistance, seizing beachheads, and beginning an offensive into the depth of Norwegian territory.

The Soviet Union has already repeatedly stated its readiness to begin talks on the limitation and reduction of the scale of military activity in the North [of Europe]. Moreover, in Murmansk and later in Oslo, our country also introduced specific proposals directed at lowering the level of military confrontation in this region. Unfortunately, a positive response from the NATO countries has never followed them. Obviously, those who create scenarios and conduct "cold winters" would like to freeze the process of normalizing international relations for as long as possible. And "Cold Winter-89" is new evidence of this.

#### **FRG Said To Develop Nuclear-Capable Enhanced-Range Missiles**

52000034 Moscow SOTSIALISTICHESKAYA  
INDUSTRIYA in Russian 16 Mar 89 p 5

[TASS item: "Missile Being Developed"]

[Text] Bonn, 15 Mar—The Bundeswehr command, together with the military-industrial complex, is working

out plans to develop [sozdaniye] new air-launched enhanced-range missiles [aviatsionnyye rakety povyshennoy dalnosti], which can carry either conventional or nuclear warheads.

#### **Dangers Seen in West European Military Integration**

18010466 Moscow KRASNAYA ZVEZDA in Russian  
23 Mar 89 First Edition p 3

[Article by V. Pustov: "With Downcast Eyes"]

[Text] These days in the West one does not frequently encounter those who will look you straight in the eye, as it were, and speak against reduction of the level of military confrontation on our continent. It is a different matter when it comes to those circles that are not ready to reduce the arms race, placing their hopes in military strength, who speak with downcast eyes behind which they strive to conceal their militaristic ambitions.

Is this not what was demonstrated by the majority of deputies of the European parliament when they approved the recent appeals to the European Economic Community (EEC) to devote themselves completely to questions of defense and the appeals to the West European Union (WEU) to create a "European support for NATO"? More concretely, we are speaking about developing within the framework of the EEC and the WEU a joint military policy, forced military integration, the creation of a "common market for arms," and so forth. As if in support of these ideas they speak of reducing the imbalance of armed forces and arms between the countries of NATO and the Warsaw Pact, and also the establishment of a "real partnership" with the United States.

Thus the European parliamentarians essentially for the first time did not simply discuss the fundamental issues of military policy, but also spoke about the majority of them in a spirit that in no way corresponds to the process of further improvement of the situation in Europe that is currently in progress. As if they did not know that in Vienna there are important negotiations between the countries of the two military alliances concerning the reduction of conventional armed forces and confidence-building measures.

The relatively tight military integration in the West European countries did not end with discussions. Certain steps are also being taken in this direction. France and the FRG, for example, have created a joint defense council and they are forming a joint brigade consisting of 4,200 men. These countries are cooperating more in the creation of new arms and military equipment.

Bonn is striving for active military cooperation with other European NATO countries as well. Thus it intends to form within this framework the "European" multinational division numbering 15,000 and consisting of units and subunits of the FRG, Great Britain, the Netherlands, Belgium, and Luxembourg.

Deputies of the European parliament, one must assume, taking into account the anti-nuclear attitudes of the West European public, refused to discuss the question of "modernization" of the NATO tactical nuclear weapons. But this dangerous caprice is not ruled out by its influential supporters on both sides of the Atlantic, especially in Washington, London, and the NATO staff headquarters. Incidentally, they are making themselves known in the FRG as well, where even the government, for a number of reasons, is in no hurry in this matter to make a decision that is unpopular among the population.

For example, the Inspector General of the Bundeswehr Adm D. Bellershof cannot conceal his attraction to nuclear weapons. In a circular stamped "For Official Use" he, according to a report in the magazine STERN, recommends replacing the destroyed American Pershings and cruise missiles by "changing over to other nuclear weapons." Nor does the Admiral wish to refrain

from cultivating the "image of the enemy." Here is how he relays to his subordinates the results of the USSR peace initiative: "The threat has actually increased even though the feeling of being threatened has weakened."

This clever thesis essentially lies at the basis of the appeal of the European parliament to create a "European support for NATO." It, in turn, is to equalize the desire of the West European countries to solve the problems that exist in their partnership with the leading power of the block—the United States. Far from everything is going smoothly there. In Washington they can hardly have complete confidence in the desire of the European allies, on the basis of economic, political, and military integration, to acquire "additional weight" in international affairs, including in relations with the United States. They also take something else into account there. "The Bush administration," a group of state department analysts writes in the WASHINGTON POST, "is uneasy about the fact that people in Europe are becoming more and more enthusiastic about Mikhail Gorbachev. It should experience the same uneasiness in from the growing wave of anti-imperialist sentiment in Europe...." It seems that the ones bothered by all this are the same circles that do not wish to let go of the policy "from a position of strength."

**Emigre Artist Shemyakin on Efforts to Free Soviet POW's in Afghanistan**

18000684z Moscow SOVETSKAYA KULTURA  
in Russian 23 Mar 89 p 4

[Interview with Mikhail Shemyakin by Gennadiy Vasilyev]

[Exerpts] [Passage omitted].

Mikhail Shemyakin is a Russian artist living in New York. Recently I managed to see him again. ...

We had not seen one another for more than a year. We had a lot to talk about. ... Our conversation was about Afghanistan or, more concretely, about Soviet POW's. Because Shemyakin is a person who is quite sensitive to the fact that he belongs to his homeland, to its history and current concerns, and he has great sympathy for the suffering of the Soviet boys who ended up in the hands of the Afghan armed opposition and, being the chairman of the International Committee for the Release of Soviet POW's in Afghanistan, he is trying to do everything possible for them to return home.

[Passage omitted].

[Vasilyev] According to your figures, how many of our boys are being held prisoner? Where are they?

[Shemyakin] One of the leaders of the 'seven' gave the figure of 300 men. Others, with whom I have entered into negotiations here in New York, say that this is a lie and that in fact many fewer are still alive. Do you know how the thing was arranged from the very beginning? Our boys sit in pits and for each prisoner there are four guards—two stand guard during the day and two at night. And this convoy is also supposed to share food and water with the prisoners. But why share? It is simpler to kill them... The conditions in which the POW's are kept are extremely severe. Many cannot hold up. Some have been killed while attempting to flee while others have committed suicide. The war has already ended. The Soviet Union has withdrawn its troops from Afghanistan. But the task of saving the POW's has not been removed from the agenda. We must look for ways of access to those who are being held prisoner, enter into negotiations with the Mujahidin, and try to get our boys out of captivity.

[Vasilyev] How is this done in practice?

[Shemyakin] I shall tell you about myself. I come here to my basement in New York where Afghan refugees are sitting. They are young, old, some are almost children. The father of one of them has died, another has lost a brother, and a third has had her child ripped out of her arms. They have come here to meet with me, a Russian. And I bring the conversation around to releasing our POW's. I say that the Koran, like the Gospel, appeals to

us to be merciful. The children listen to me and sometimes forget that I am a Russian American, that I am speaking on behalf of the committee, and they begin to get excited and come to me.

We are trying to find among the Afghan opposition people who are ready to listen to us, with whom we can speak. But it is extremely difficult to do this. The Mujahidins are divided and the prisoners are in the hands of individual commanders. Some want to exchange our POW's for Afghan prisoners, others demand money, and still others want to exchange for binoculars.

[Vasilyev] Have you tried to establish any ties with the Pakistani authorities?

[Shemyakin] We have asked the authorities in Islamabad to let our committee into Pakistan where the main bases of the armed Afghan opposition are located. But we were refused a visa. We wrote to the President of the United States. We asked the White House to receive members of the committee and to help in obtaining the release of Soviet servicemen who had been taken prisoner. The answer we received was polite but promised no assistance. But we are not giving up, we shall not stop until there is at least some hope of saving our boys.

[Vasilyev] You are the chairman of the committee, but who are its members?

[Shemyakin] Among its members are a historian and specialist on Russia, Suzannah Massy, the writer Bob Massy who received the Pulitzer Prize for his book "Peter I," Marina Vladi, Rabbi B. Mendelbaum, the renowned sculptors George Segal and Leonard Baskin, and the eminent commentator Harry Farber. The majority are either emigrants from Russia or people linked to Russia through their creative work. Recently a well known Italian art historian, Prof Gribaudo joined the committee.

[Vasilyev] And are there any former Soviet POW's in the United States?

[Shemyakin]

There are. According to my calculations there are about 15. Some of them stay with me. They sit here at this table and talk. Frequently they cry. But they are afraid to return. They are all very strongly affected by the fact that one of the first POW's from Afghanistan who returned to the Soviet Union was put in jail. True, they let him go later. And they are also very much afraid of the Afghan vets. If we go home, they will be right on top of us asking where we were. Did we not desert? How can we prove it? So they have this fear inside them as well. But they want to go home, they are still children, their mothers are waiting for them.

It is not only the fate of the POW's that bothers the artist. He is also trying to help those who suffered in combat on Afghan soil. Recently he turned over the earnings from the sale of a unique album of Vysotskiy records to the fund for the rehabilitation of Soviet Afghan vets. The

fund is also getting the money received for a four-volume Vysotskiy album he prepared.

[Passage omitted].

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